SERVICE MANUAL

BE-3D CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-25C2A	RM-862	Italian	SCC-K05K-A
KV-25C2B	RM-862	French	SCC-K01K-A
KV-25C2D	RM-862	AEP	SCC-K07M-A
KV-25C2E	RM-862	Spanish	SCC-K06K-A

MICROFILM

TRINITRON® COLOR TV

SONY®

ITEM MODEL	Television System	Channel Coverage	Colour System
Italian	B/G/H	VHF: E2-E12 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 UHF: E21-E69	PAL NTSC3.58/4.43 (video input only)
French	B/G/H, D/K, L, I	L SECAM VHF: F2-F10 UHF: F21-F69 TV CABLE TV (1) VHF: B-Q UHF: S21-S44 PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 PAL I UHF: B21-B69 D/K VHF: R01-R20 UHF: B21-B69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46	PAL, SECAM NTSC3.58/4.43 (video input only)
AEP	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R20 UHF: B21-B69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46	PAL, SECAM NTSC3.58.4.43 (video input only)
Spanish	B/G/H, D/K	PAL B/G/H VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R20 UHF: B21-B69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, S42-S46	PAL, SECAM NTSC3.58/4.43 (video input only)

MODEL	25C2A	25C2B	25C2D	25C2E
Power Consumption	96W	94W	94W	94W

SPECIFICATIONS

Picture Tube — Super Trinitron
Approx. 63 cm (25 inches)
(Approx. 59 cm picture measured diagonally)
110° -deflection

Rear/Front Terminals

[REAR]

1 21-pin Euro connector (CENELEC standard)
- Inputs for audio / video signals
- Inputs for RGB
- Outputs for TV audio and video signals

2/ 2, 21-pin Euro connector (CENELEC standard)
- Inputs for audio / video signals
- Inputs for S video
- Outputs for TV audio and video signals (selectable)

audio outputs - phono jacks
Woofer terminals : 2-pin DIN

[FRONT]

3 , Video input - phono jack
3 , Audio inputs - phono jacks
3 , S video input - 4 pin DIN
Stereo minijack - headphone jack

Sound output
Left/Right — 2x10W (RMS)
2x20W (music power)
Woofer — 1x20W (RMS)
1x40W (music power)
Dimensions — 717x507x480 mm approx.
Weight — Approx. 35.0 kg (with woofer)
Supplied accessories
RM-862 Remote Commander (1)
Batteries R6 (2)
woofer (1)
Other features
Fastext
NICAM (KV-25C2B,25C2E only)

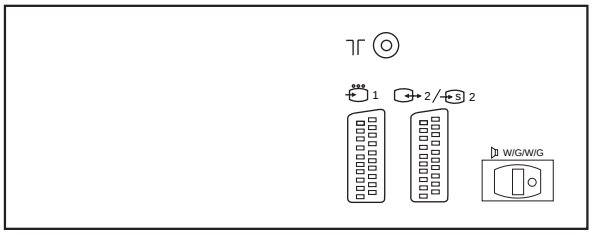
[RM-862]

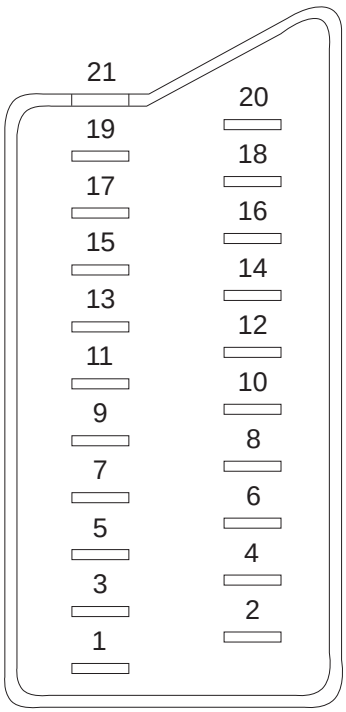
Remote control system	Infrared control
Power requirements	3V dc (2 batteries) R6 (size AA)
Dimensions	Approx. 210x56x24 mm (w/h/d)
Weight	Approx. 110g (Not including battery)

Design and specifications are subject to change without notice.

Item \ Model name	KV-25C2A	KV-25C2B	KV-25C2D	KV-25C2E
PIP	OFF	OFF	OFF	OFF
MPIP	OFF	OFF	OFF	OFF
Rotation Coil	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON
Scart 4	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON
TXT	ON	ON	ON	ON
FLOF	ON	ON	ON	ON
TOP	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON
Norm I	OFF	ON	OFF	OFF
Norm D/K	OFF	ON	ON	ON
Norm L	OFF	ON	OFF	OFF
Language Preset	Italian	French	German	Spanish

21 pin connector (1, 2 / S 2)





Pin No.	1	2	4	Signal	Signal Level
1	○	○	○	Audio output B (Right)	Standard level : 0.5V rms Output impedance : Less than 1k ohms*
2	○	○	○	Audio input B (Right)	Standard level : 0.5V rms Output impedance : More than 10k ohms*
3	○	○	○	Audio output A (Left)	Standard level : 0.5V rms Output impedance : Less than 1k ohm*
4	○	○	○	Ground (Audio)	
5	○	○	○	Ground (Blue)	
6	○	○	○	Audio input A (Left)	Standard level : 0.5V rms Output impedance : Less than 10k ohm*
7	○	●	●	Blue input	0.7 ± 3dB, 75 ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More10k ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (Green)	
10	○	○	○	Open	
11	○	●	●	Green	
12	○	○	○	Open	
13	○	○	○	Ground (Red)	
14	○	○	○	Ground (Blanking)	
15	○	—	—	Red input	0.7 ± 3dB, 75 ohms, positive
	—	○	○	(S signal) croma input	0.7 ± 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75 ohms
17	○	○	○	Ground (Video output)	
18	○	○	○	Ground (Video input)	
19	○	○	○	Video output	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
20	○	—	—	Video input	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
	—	○	○	Video input Y (S signal)	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
21	○	○	○	Common ground (plug, sheild)	

○ Connected ● Not Connected (Open) * at 20Hz - 20kHz

TABLE OF CONTENTS

Section	Title	Page
1. GENERAL		
	Overview	7
	Getting Started	8
	TV Operation	9
	Advanced Operations	10
	Teletext	16
	Optional Equipment	17
	For Your Information	19
2. DISASSEMBLY		
2-1.	Rear Cover Removal	19
2-2.	Chassis Assy Removal	19
2-3.	Service Position	19
2-4.	Wire Dressing	19
2-5.	A Board Removal	20
2-6.	A Extension Board	20
2-7.	Picture Tube Removal	21
	Removal and Replacement of The Main-Bracket Bottom Plates	22
3. SET-UP ADJUSTMENTS		
3-1.	Beam Landing	23
3-2.	Convergence	24
3-3.	White Balance	26
4. CIRCUIT ADJUSTMENTS		
4-1.	Electrical Adjustments	27
4-2.	Test Mode 2 :	30
4-3.	BE-3D Self Diagnostic Software	31
5. DIAGRAMS		
5-1.	Block Diagrams	33
5-2.	Circuit Boards Location	38
5-3.	Schematic Diagrams and Printed Wiring Boards	38
	* D Board	43
	* A Board	48
	* C Board	58
	* IF Board [VIF (AEP)]	61
	* IF Board [VIF (FR)]	61
	* K Board	63
	* J3 Board	64
	IC Blocks	65
5-4.	Semiconductors	67
6. EXPLODED VIEWS		
6-1.	Chassis	69
6-2.	Picture Tube	70
7. ELECTRICAL PARTS LIST		71

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.
LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

SAFETY-RELATED COMPONENT WARNING!!

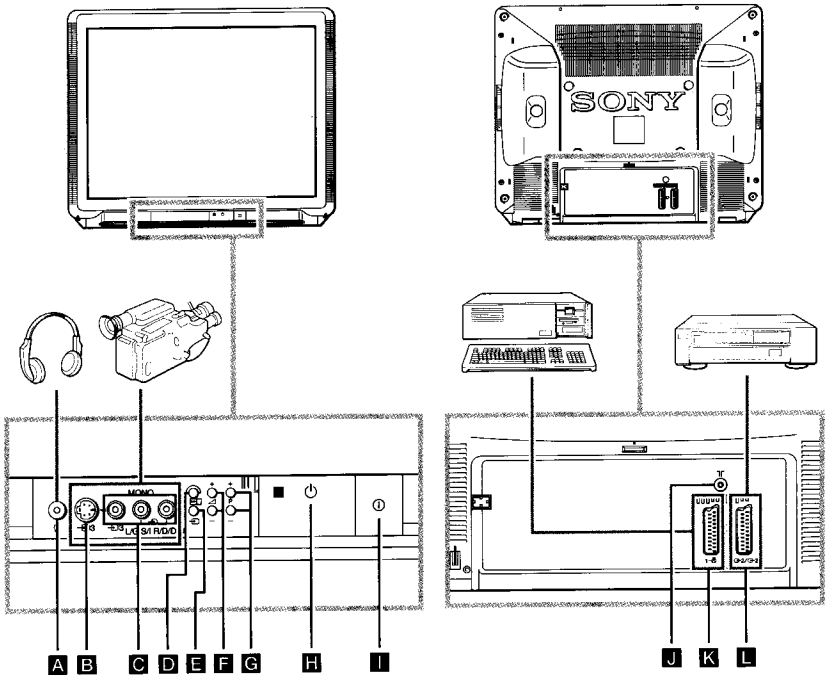
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND, IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

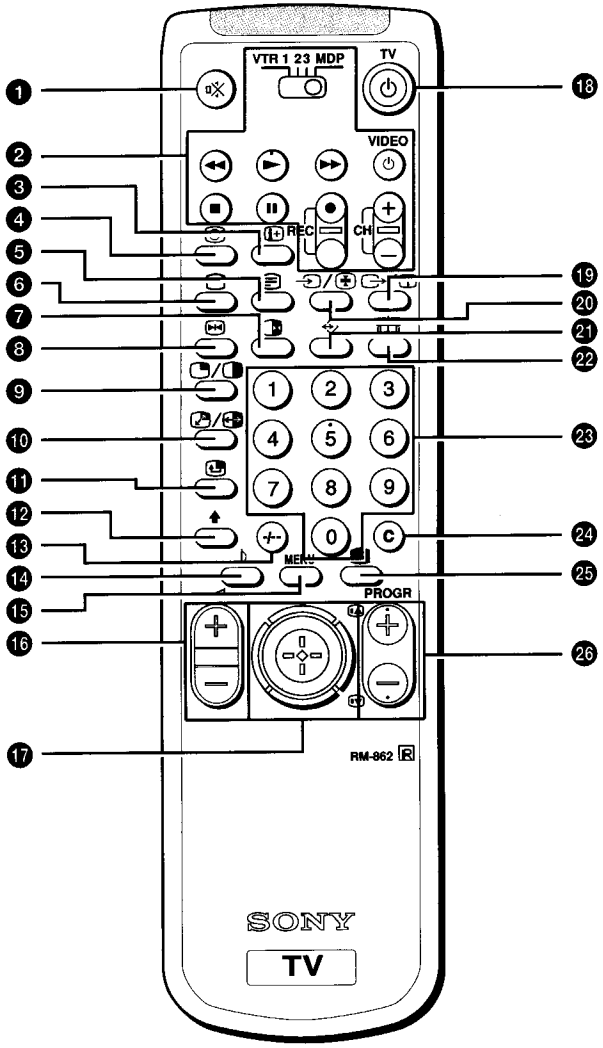
ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE PUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.





Overview

This section briefly describes the controls and the buttons on the TV set and on the Remote Commander. Please open the flaps at the front and at the back of the Instruction manual for illustrations of the Remote Commander and the TV set. Letters in boxes refer to the buttons on the TV set, numbers in circles to the buttons on the Remote Commander. For more information, refer to the page numbers given next to each description.

TV buttons and Terminals

Reference and Symbol	Name	Refer to Page
Front of the set		
A	Headphones jack	59
B	S video input jack	59
C	Audio/video input jacks	59
D	Automatic Preset button	41
E	Input mode button	60
F	Volume control	43
G	P +/-	42
H	Standby mode indicator	42
I	Main power switch	42
Rear of the set		
J	Aerial socket	40
K	21 pin Euro connector	59
L	21 pin Euro connector	59
M	Woofer terminal	40

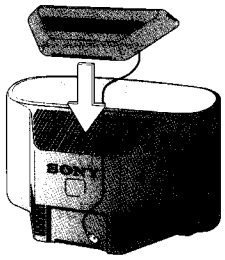
Remote Commander Operation

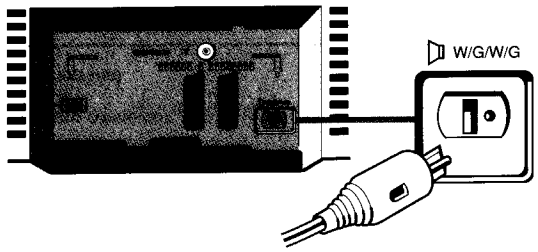
Reference and Symbol	Name	Refer to Page
1	Muting on/off button	42
2	**VCR operation**	62
	VTR 123 MDP Video equipment selector	62
	◄◄ ► ►► ■ II ● Buttons to operate Video equipment	62
	VIDEO ⏻, CH +/-	
3	On-screen display button	42
4	Time display button	42
5	Teletext button	57
6	TV power on/TV mode button	42, 43
7 8 9 10 11 12	No function on this set	-
13	- / - - Double digit entering button	42
14	Sound mode button	49
15	**MENU** Menu on/off button	44
16	Volume control button	42
17	Joystick for menu selection Press to confirm selection (OK function)	44
18	TV⏻ TV standby button	42
19	No function on this set	-
	Teletext: reveal button	57
20	Input mode button	60
	Teletext: Freezing the subpage	57
21	Teletext: Favourite pages button	58
22	Screen format button	42
23	1, 2, ... 9, 0 Number buttons	42
24	**C** Direct channel button	43
25	Picture mode button	49
26	**PROGR** +/- Programme buttons	42
	Teletext: Page up/page down buttons	57

Step 1

Connecting the Woofer

Place the woofer on top of the TV set. Connect the lead of the woofer to the terminal ◁ W/G/W/G M at the rear of the set.





Step 2

Connecting the Aerial

(If you connect a VCR, skip to step 3)

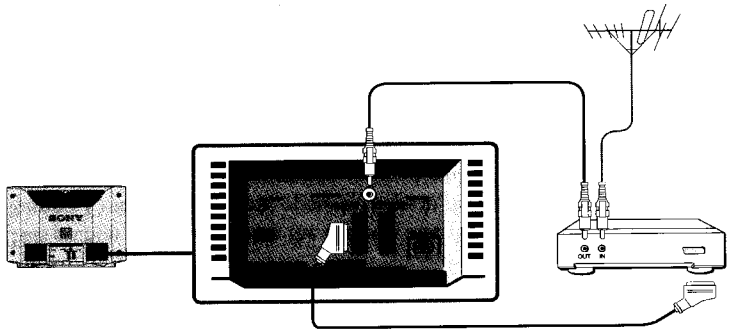
Insert the aerial plug tightly into the aerial socket ⅂ J. Use a good-quality aerial cable (not supplied), corresponding to the relevant regulations.

Step 3

Connecting a VCR

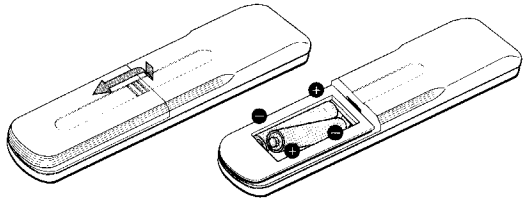
We recommend that you tune in the VCR signal to programme number »0«. For details, see »Presetting Channels Manually« on page 46.

See "Connecting Optional Equipment" on page 59 for more information.



Step 4

Inserting the Batteries Into the Remote Commander



Respect your environment! Dispose of used batteries in an environmentally friendly way.

Step 5

Presetting Channels Automatically

With this function, the TV can automatically search and store up to 100 different channel numbers.

If you prefer manual presetting, refer to »Presetting Channels Manually« on page 46.

1 Plug into mains.
Press the power switch ⏻ I on the TV set.

2 Press and hold the button ▸▸□ D on the TV set until the automatic menu is displayed and the search starts.

After all available channels are stored, the normal TV picture is shown.

TV Operation

This section explains functions used whilst watching TV. Most operations are carried out using the remote commander (numbers in circles). All basic functions are also available on the TV set (letters in boxes). Open the flaps at the front and at the back of the Instruction Manual to see the illustrations of the Remote Commander and the TV set.

To	Press
Switch on	⏻ I on TV
Switch off temporarily	⏻ 18 TV is now in standby mode and indicator ⏻ H on TV lights up.
Switch on from standby mode	▭ 6, PROGR +/- 26 G or any number button 23
Switch off completely	⏻ I on TV To save energy, switch off your TV completely when TV is not in use.
Select programmes	PROGR +/- 26 G or number buttons 23. For double digit number, press -/- - 13 then the number, e.g. for 23, press -/- - 13 then 2 and 3.
Display on screen indications	i+ 3. Press again to make the indications disappear.
Adjust the volume	◿ + or - 16 F
Mute the sound	🔇 1. Press again to restore the sound.
Display the time (only available when teletext	🕒 4. Press again to make the display disappear.

To	Press
View programmes in 16:9 mode	▯▯ 22. Press again to return to 4:3 mode.
Tune in a channel temporarily	C 24 once for terrestial channels (or twice for cable channels). The indication »C« (»S« for cable channels) appears. Enter the double digit number, e.g. for 4, press 0 then 4.
View video input picture (see page 60 for detailed information)	→ 20 E repeatedly until the desired video input appears. Press ▭ 6 to restore the TV picture.
View teletext (see page 57 for detailed information)	
Switch on	☰ 5
Select a page	three number buttons 23 or ☰▲ 26 (for next page) or ☰▼ 26 (for previous page).
Use fastext	Push joystick 17 to select a colour.
Switch off	▭ 6

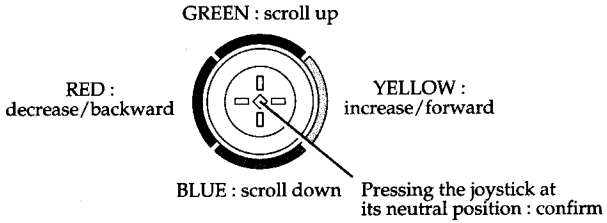
Adjusting and Setting the TV Using the Menu

You can adjust and set various functions on the TV using the following remote commander buttons.

1 Press MENU ⓯ to switch menu on/off.

MENU

2 Use the joystick ⓱ as follows:

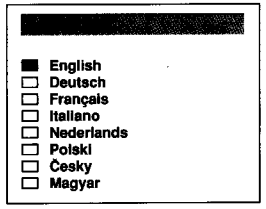


Choosing the Menu Language

This function enables you to change the language of the menu screens.

1 Press power switch ⏻ on the TV. If the standby indicator ⏻ on the TV is lit, press ▭ ❻ or a number button ㉙ on the Remote Commander.

2 Press the MENU button ⓯ on the remote commander.



3 Push joystick ⓱ to blue or green to select the language you want then push to yellow.

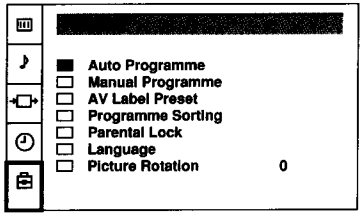
4 Press the MENU button ⓯ to restore the normal TV picture.

Presetting Channels Automatically

You may have already preset the channels automatically by using the method shown on page 41. You can also preset channels automatically by using the remote commander as follows:

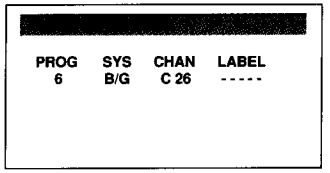
1 Press the MENU button ⓯.

2 Push joystick ⓱ to blue or green to select the symbol 🧰 on the menu screen then push to yellow.



3 Push to blue or green to select »Auto Programme«.

4 Push to yellow and hold until the automatic menu is displayed and the search starts. After all available channels have been preset, the normal TV picture is shown.

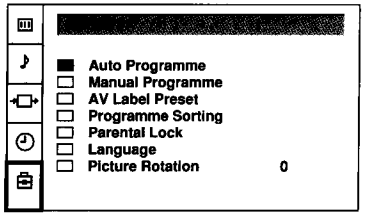


Presetting Channels Manually

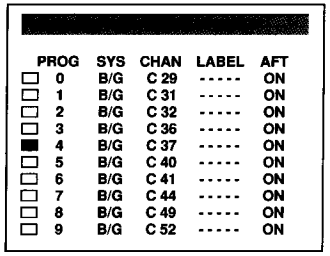
This function enables you to preset channels one by one to different programme numbers. This is also convenient for allocating programme numbers to various video input sources.

1 Press the MENU button ⓯.

2 Push joystick ⓱ to blue or green to select the symbol on the menu screen then push to yellow.



3 Push to blue or green to select »Manual Programme« then push to yellow .



PROG	SYS	CHAN	LABEL	AFT
0	B/G	C 29	-----	ON
1	B/G	C 31	-----	ON
2	B/G	C 32	-----	ON
3	B/G	C 36	-----	ON
4	B/G	C 37	-----	ON
5	B/G	C 40	-----	ON
6	B/G	C 41	-----	ON
7	B/G	C 44	-----	ON
8	B/G	C 49	-----	ON
9	B/G	C 52	-----	ON

4 Push to blue or green to select to which programme number you want to preset a channel then push to yellow.

5 Push to blue or green to select the TV broadcast system (B/G for western European countries or D/K for eastern European countries) or a video input source (AV1,AV2 ...) then push to yellow.

6 Push to blue or green to select »C« (for terrestrial channels) or »S« (for cable channels) then push to yellow.

7 Select the first number digit of »CHAN« (channel) then the second number digit of »CHAN« with the number buttons ㉓ on the remote commander

or

Push joystick ⓱ to blue or green to search for the next available channel.

8 If you want to store the channel, go to step 9. If not, select a new channel using the number buttons ㉓ or push to blue or green to resume the search.

9 Press the joystick ⓱.

10 Repeat steps 4 to 9 to preset other channels.

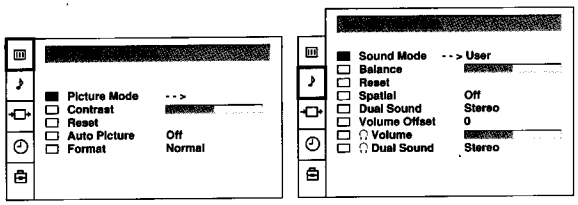
11 Press the MENU button ⓯ to restore the normal TV picture.

Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste.

1 Press the MENU button ⓯.

2 Push joystick ⓱ to blue or green to select ▣ for picture control or ♪ for sound control then push to yellow.



3 Push to blue or green to select the desired item then push to yellow.

4 Push to red or yellow to alter the item then press the joystick ⓱.
For the effect of each control, see the following tables.

5 Repeat steps 3 and 4 to adjust the other items.

6 Press the MENU button ⓯ to restore the normal TV picture.

PICTURE CONTROL	Effect
Picture Mode	•User —> Game —> Movie —> Sports —> Live In »User« mode, you can preset Brightness, Colour, Sharpness and Hue (NTSC signals only) as follows: **1** Push joystick ⓱ to blue or green to select the desired item then push to yellow. **2** Push to red or yellow to adjust then press the joystick ⓱. **3** Push to red to return to the PICTURE CONTROL menu.
Contrast	•Darker ——I—— Brighter
Reset	•Resets picture to the factory preset levels.
Auto Picture	•All the picture levels automatically change according to the surrounding lighting level (Auto Picture Control).
Format	•Wide screen effect (16:9)

SOUND CONTROL	Effect
Sound Mode	•User —> Rock —> Jazz —> Pop In »User« mode, you can preset Treble and Bass as follows: **1** Push joystick ⓱ to blue or green to select the item then push to yellow. **2** Push to red or yellow to adjust then press the joystick ⓱. **3** Push to red to return to the »SOUND CONTROL« menu.
Balance	•Left ——I—— Right
Reset	•Resets sound to the factory preset levels.
Spatial	•Acoustic sound effect
Dual Sound	•A: Left channel —> B: Right channel —> Stereo —> Mono
Volume Offset	•Presets the volume level for individual programmes -12 —— 0 —— +12
∩ Volume	•Adjusts the headphone volume
∩ Dual Sound	•Selects the headphone channels A: Left channel —> B: Right channel —> Stereo —> Mono

Changing Modes Quickly

You can quickly change the Sound Mode or the Picture Mode without entering the »SOUND CONTROL« or the »PICTURE CONTROL« menu.

1 Press ■ ㉕ for the picture or ♪ ⓮ for the sound.

2 Push joystick ⓱ to blue or green to select the desired mode.

3 Press ■ ㉕ or ♪ ⓮ again to restore the normal TV screen.

Manual Fine-Tuning

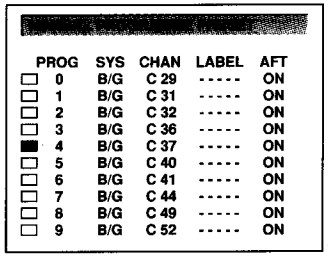
Normally, the automatic fine-tuning (AFT) function is operating.

If the picture is distorted however, you can manually fine-tune a channel to obtain a better picture reception.

1 Press the MENU button ⓯.

2 Push joystick ⓱ to blue or green to select the symbol 🔧 on the menu screen then push to yellow.

3 Push to blue or green to select »Manual Programme« then push to yellow.



4 Push to blue or green to select the programme number which corresponds to the channel you want to manually fine-tune.

5 Push to yellow repeatedly until the AFT position changes colour.

6 Push to blue or green to fine-tune the channel frequency (-15 to +15).

7 Press the joystick ⓱.

8 Repeat steps 4 to 7 to fine-tune other channels.

9 Press the MENU button ⓯ to restore the normal TV picture.

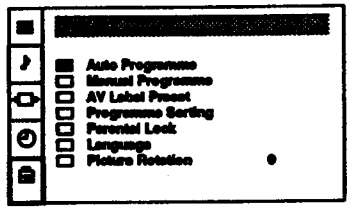
Sorting Programme Positions

This function enables you to exchange the programme positions.

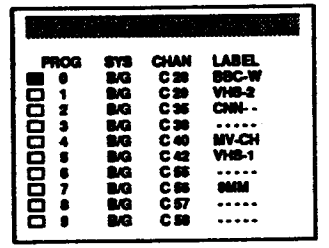
1 Press the MENU button ⓯.

2 Push joystick ⓱ to blue or green to select the symbol 🔧 on the menu screen then push to yellow.

3 Push to blue or green to select »Programme Sorting« then push to yellow .



4 Push to blue or green to select the programme position you want to exchange then push to yellow.



5 Push to blue or green to select the programme position of the channel you want exchanged then push to yellow.

6 Repeat steps 4 to 5 if you wish to exchange other programme positions.

7 Press the MENU button ⓯ to restore the normal TV picture.

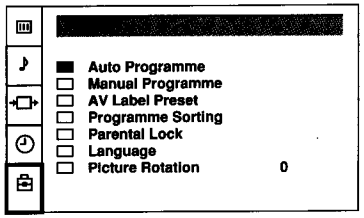
Using Parental Lock

This function enables you to prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

1 Press the MENU button ⓯.

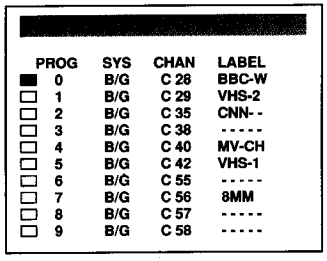
2 Push joystick ⓱ to blue or green to select the symbol 🧰 on the menu screen then push to yellow.

3 Push to blue or green to select »Parental Lock« then push to yellow.



4 Push to blue or green to select the channel you want to block then push to yellow.

The symbol 🔒 appears before the programme number to indicate that this channel is now blocked.



5 Repeat step 4 if you wish to block other channels.

6 Press the MENU button ⓯ to restore the normal TV picture.

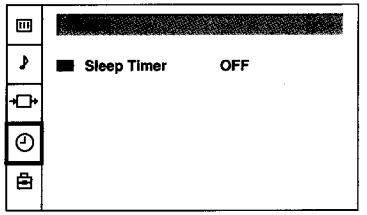
Note: To unblock, push to yellow after selecting the channel to unblock in the »Parental Lock« menu.

Using the Sleep Timer

This function enables you to select a time period after which the TV automatically switches into standby mode.

1 Press the MENU button ⓯.

2 Push joystick ⓱ to blue or green to select the symbol 🕘 on the menu screen then push to yellow.



3 Push to yellow.

4 Push to red or yellow to set time delay and press the joystick ⓱.

OFF 0:30 1:00 1:30 ..... 3:30 4:00

One minute before the TV switches into standby mode, a message is displayed on the screen.

5 Press the MENU button ⓯ to restore the normal TV picture.

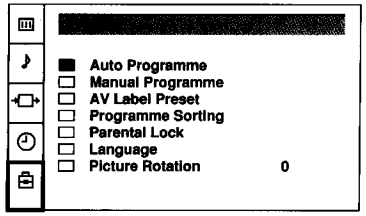
Skipping Programme Positions

This function enables you to skip unused programme positions when selecting them with the PROGR+/- buttons. However, you can still watch the channel of the skipped programme position by using the number buttons.

1 Press the MENU button ⓯.

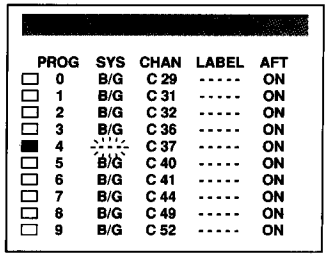
2 Push joystick ⓱ to blue or green to select the symbol 🧰 on the menu screen then push to yellow.

3 Push to blue or green to select »Manual Programme« then push to yellow.



4 Push to blue or green to select the programme position you want to skip then push to yellow.

5 Push to blue or green until »- - -« appears in the »SYS« position.



6 Press the joystick ⓱.

7 Repeat steps 4 to 6 to skip other programme positions.

8 Press the MENU button ⓯ to restore the normal TV picture.

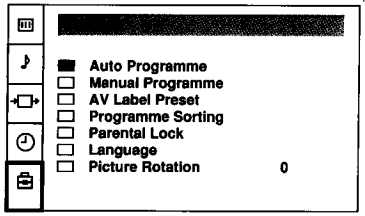
Captioning a Station Name

Names for channels are usually automatically taken from teletext if available. You can however name a channel or an input video source using up to five characters (letters or numbers).

1 Press the MENU button ⓯.

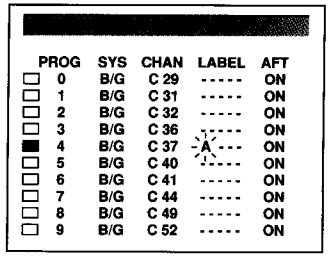
2 Push joystick ⓱ to blue or green to select the symbol 🧰 on the menu screen then push to yellow.

3 Push to blue or green to select »Manual Programme« then push to yellow.



4 Push to blue or green to select the channel you wish to caption then push to yellow repeatedly until the first element of the »LABEL« position is highlighted.

5 Push to blue or green to select a letter or number (select »-« for a blank) and push to yellow. Select the other four characters in the same way.


PROG SYS CHAN LABEL AFT
0 B/G C 29 ----- ON
1 B/G C 31 ----- ON
2 B/G C 32 ----- ON
3 B/G C 36 ----- ON
4 B/G C 37 A---- ON
5 B/G C 40 ----- ON
6 B/G C 41 ----- ON
7 B/G C 44 ----- ON
8 B/G C 49 ----- ON
9 B/G C 52 ----- ON

6 After selecting all the characters, press the joystick ⓱.

7 Repeat steps 4 to 6 to caption names for other channels.

8 Press the MENU button ⓯ to restore the normal TV screen.

Teletext

Most TV channels broadcast information via teletext. The index page of the broadcaster (usually page 100) gives you information on how to use the service. Make sure you use a TV channel with a strong signal, otherwise teletext errors may occur.

Switching Teletext on and off

1 Select the channel which carries the teletext service you wish to view.

2 Press ⊜ ❺ to display teletext.
If no teletext signal is broadcast, the indication P100 is displayed on a black screen.

3 Input three digits for the page number using the number buttons ㉓.
The page counter searches for the page and after some seconds the page is displayed.

4 Press ▢ ❻ to return to the normal TV picture.

Using Other Teletext Functions

To	Press
Access the next or preceding teletext page	⊜▲ ㉖ for the next page or ⊜▼ ㉖ for the preceding page
Mix the mode	⊜ ❺ when in teletext mode. Now the teletext page is superimposed on the TV programme. Press again to return to the normal teletext display.
Freeze a teletext subpage	⊜ ⑳. Press once again to cancel.
Reveal hidden information (e.g.: answers to a quiz)	? ⑲. Press once again to cancel.

Favourite page system

You can store up to four of your favourite teletext pages per Teletext service. In this way you have quick access to the pages you frequently use.

Storing pages

1 Use the number buttons ㉓ to select the page you would like to store.

2 Press ◈ ㉑ twice.
The colour prompts at the bottom of the screen flash.

3 Push the joystick ⑰ to the desired colour to store the selected page.
The page is now stored on this colour.

Repeat steps 1 to 3 for the other 3 pages.

Displaying the Favourite Pages

1 Press ◈ ㉑.

2 Push the joystick ⑰ to the colour on which the desired page is stored.

Make sure you press ◈ ㉑, otherwise the normal Fastext facility operates!

Using Fastext

(only available, if the TV station broadcasts Fastext signals)

With Fastext you can access pages with one key stroke . When Fastext is broadcast, a colour-coded menu appears at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue marks on the Remote Commander.

Push the joystick ⑰ to the colour mark which corresponds to the colour-coded menu. The page is displayed after some seconds.

Connecting Optional Equipment

There is a wide range of optional equipment you can connect to your TV.
Refer to the illustrations on the back flap page of this manual.

Symbol	Acceptable input signals	Available output signals
1 K	Normal audio/video and RGB	Audio/video from TV tuner
2/2 L	Normal audio/video and S video	Audio/video from selected source
3, 3 B 3 C	Normal audio/video and S video	No output

About S video input

Video signals may be separated into Y (luminance) and C (chrominance) signals. Separating the two signals prevents interference and thus improves the picture quality.

Notes on connections:

- If the picture or sound is distorted, move the VCR away from the TV.
- When connecting a monaural VCR, connect only the white jack to both the TV and VCR.
- Select »TV« for output in the »VIDEO CONNECTION« menu if you connect a decoder to 2/2 L (see page 60).

Connecting Headphones

Plug in the headphones to the ∩ socket A on the front of the TV.

Selecting Input and Output Signals

This section explains how to select the output signal from 2/2 L and how to select and view the input. You can use direct access buttons 20 E to select the input or the menu system to select input and output.

Selecting Input Signals With Direct Access Buttons

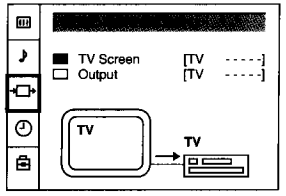
Press 20 E repeatedly .
Press 6 to restore the normal TV picture.

Symbol on the screen	Input Signal
1	Audio/video through Euro AV connector K
	RGB through Euro AV connector K
2	Audio/video through Euro AV connector L
2	S video through Euro AV connector L
3	Audio/video through the phono jacks C
3	S video through the 4 pin DIN B

Selecting With the Video Connection Menu

1 Press the MENU button 15.

2 Push joystick 17 to blue or green to select for »Video Connection« then push to yellow.



3 Push to blue or green to select »TV Screen« (input source for the TV Screen) or »Output« (output source for 2/2 L) then push to yellow.

4 Push to red or yellow repeatedly to select the desired input or output source then press the joystick 17.

5 Press the MENU button 15 to restore the normal TV picture.

Note: If you select »AUTO« for output, the output source automatically becomes the same as the desired input source.

Connecting Optional Equipment

There is a wide range of optional equipment you can connect to your TV. Refer to the illustrations on the back flap page of this manual.

Symbol	Acceptable input signals	Available output signals
1 K	Normal audio/video and RGB	Audio/video from TV tuner
2/2 L	Normal audio/video and S video	Audio/video from selected source
3, 3 B 3 C	Normal audio/video and S video	No output

About S video input

Video signals may be separated into Y (luminance) and C (chrominance) signals. Separating the two signals prevents interference and thus improves the picture quality.

Notes on connections:

- If the picture or sound is distorted, move the VCR away from the TV.
- When connecting a monaural VCR, connect only the white jack to both the TV and VCR.
- Select »TV« for output in the »VIDEO CONNECTION« menu if you connect a decoder to 2/2 L (see page 60).

Connecting Headphones

Plug in the headphones to the ∩ socket A on the front of the TV.

Troubleshooting

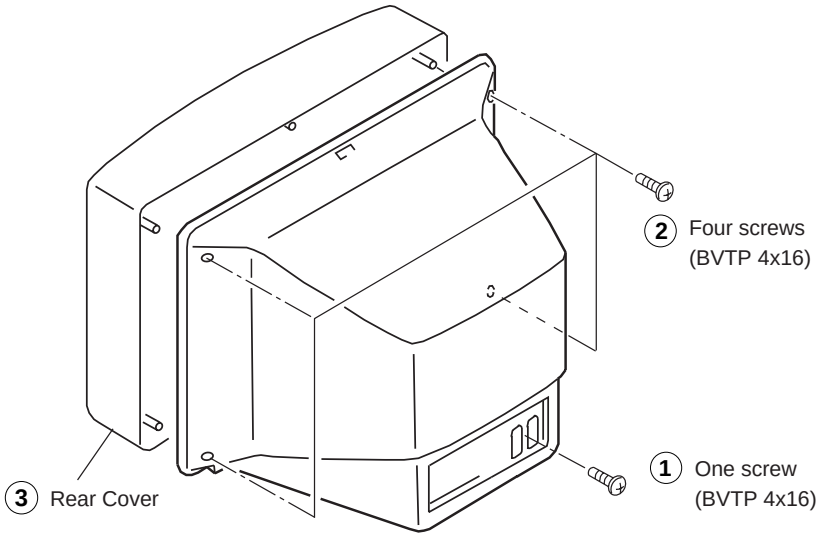
Here are some simple solutions to the problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	• Plug the TV in. • Press ⏻ I on the TV. (If ⏻ indicator H is on, press 🖵 6 or a programme number 23 on the Remote Commander.) • Check the aerial connection. • Check if the selected video source is on. • Turn the TV off for 3 or 4 seconds then turn it on again using ⏻ I.
Poor or no picture (screen is dark), but good sound	• Press MENU 15 to enter the »PICTURE CONTROL« menu and adjust »Contrast«, »Brightness« and »Colour«.
Poor picture quality when watching an RGB video source.	• Press 20 E repeatedly to select 1.
Good picture but no sound	• Press + 16 F. • If 🔇 is displayed on the screen, press 🔇 1.
No colour for colour programmes	• Press MENU 15 to enter the »PICTURE CONTROL« menu, select »Reset« then press the joystick 17.
Remote Commander does not function.	• Replace the batteries

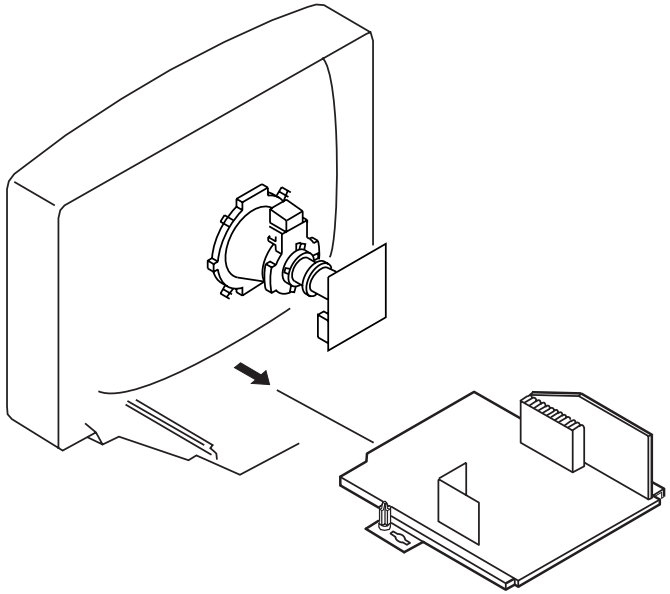
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

SECTION 2
DISASSEMBLY

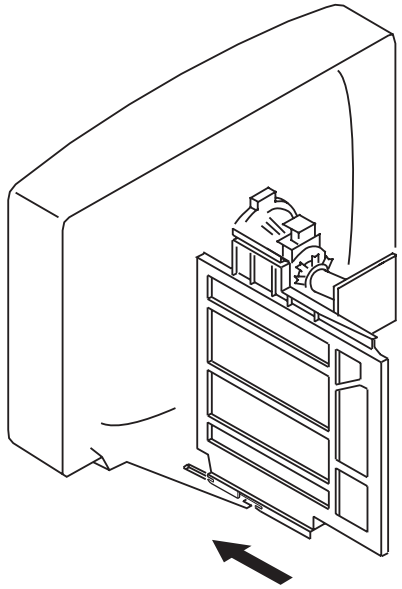
2-1. REAR COVER REMOVAL



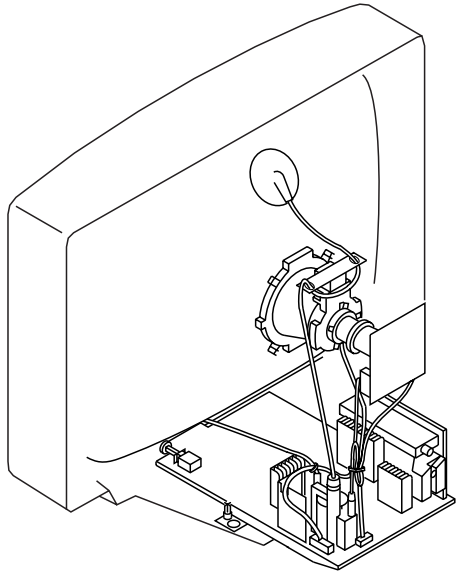
2-2. CHASSIS ASSY REMOVAL



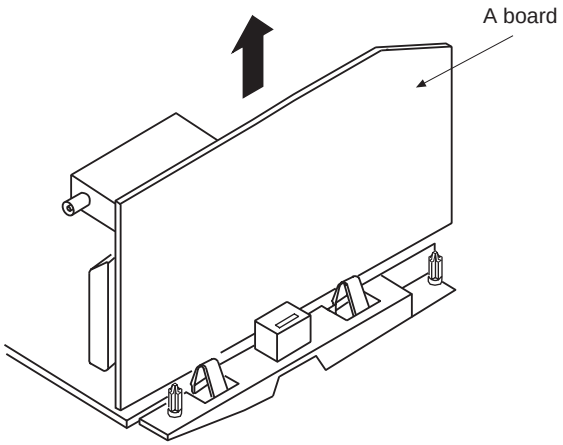
2-3. SERVICE POSITION



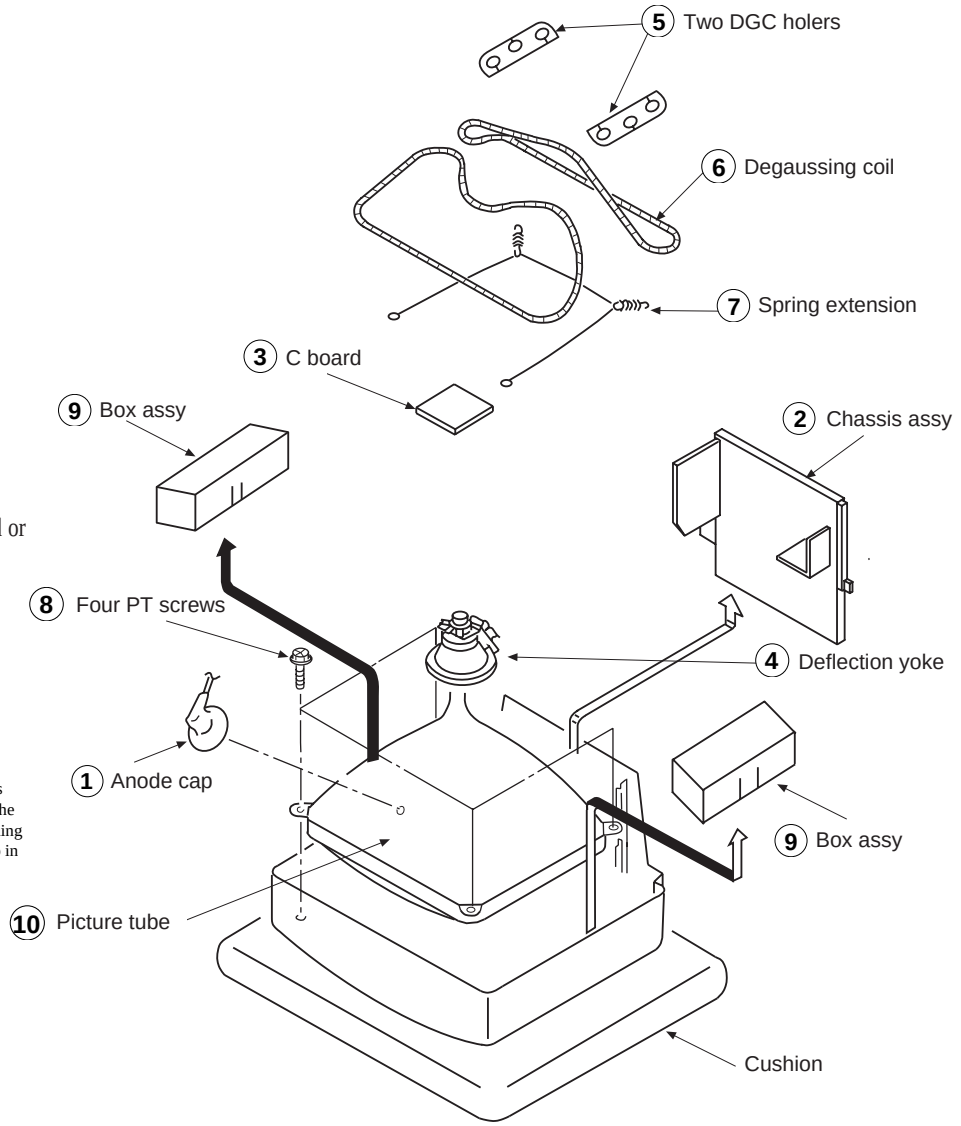
2-4. WIRE DRESSING



2-5. A BOARD REMOVAL



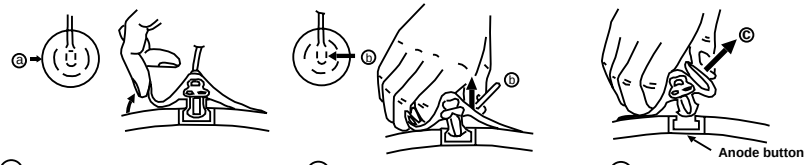
2-6. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

*** REMOVING PROCEDURES.**



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ

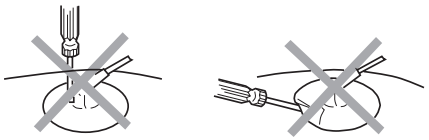
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

• HOW TO HANDLE AN ANODE-CAP

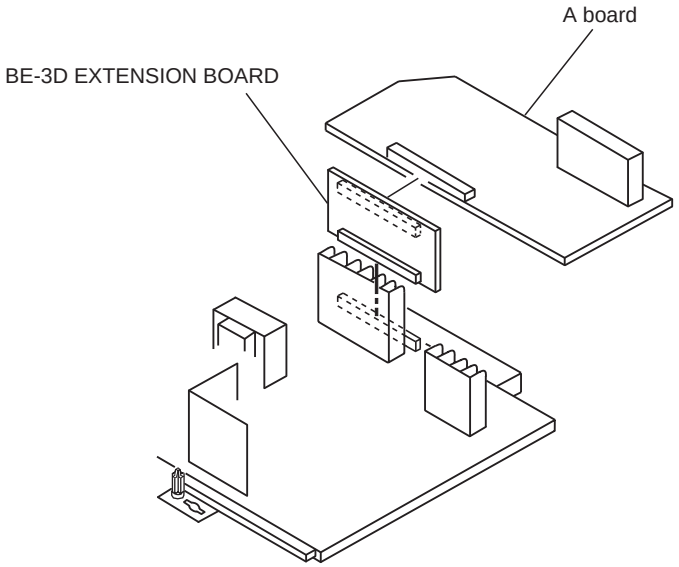
① Don't damage the surface of anode-cap with sharp shaped material !

② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.

③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.



2-7. A EXTENSION BOARD



REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

For safety reasons, on no account should the plates be removed and not refitted after servicing.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the D Board printed circuit, the bottom plates fitted to the main chassis bracket require to be removed. This is performed by cutting the gates with a sharp wire cutter at the locations shown and indicated by arrows.

Note : There are 5 plates fitted to the main bracket and secured by 4 or 6 gates. Only remove the necessary plate to gain access to the circuit board.

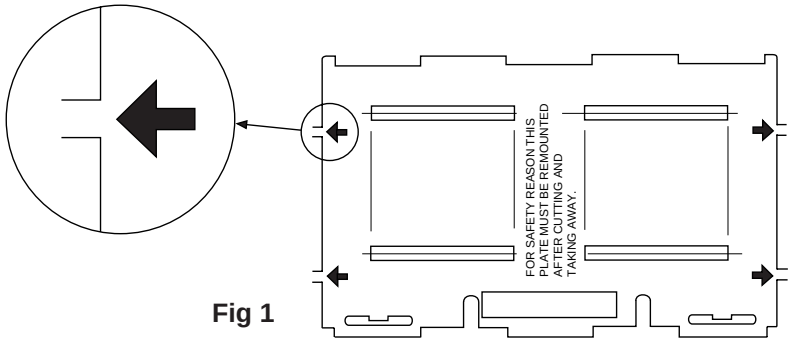


Fig 1

(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.
The plates are identified by markings A-B-C-D-E on their top side.

1. Identify the plate by locating its marking.
2. Turn the plate over noting where the marking is located.
3. Locate the corresponding marking indicated on the main chassis bracket. See Fig 2.
4. Refit the plate as indicated in Fig 3 with the markings located next to each other.

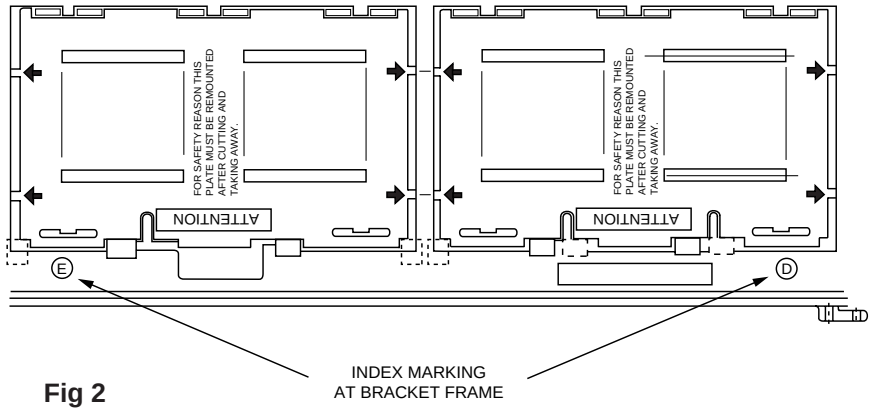

FOR SAFETY REASON THIS PLATE MUST BE REMOUNTED AFTER CUTTING AND TAKING AWAY.
ATTENTION
E
D
INDEX MARKING AT BRACKET FRAME

Fig 2

In the event of the plates requiring to be removed at a later stage, this can be achieved by inserting a screwdriver in the snap-recess indicated as in Fig 4 and lifting out.

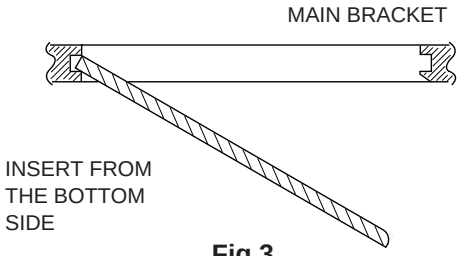


Fig 3

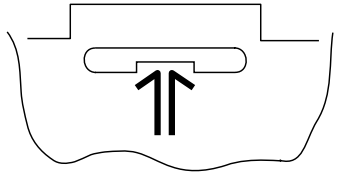


Fig 4

SECTION 3
SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings :

◑ Contrast ..... 80% (or remote control normal)
☼ Brightness 50%

- Carry out the following adjustments in this order :

1. Beam landing
2. Convergence
3. Focus
4. White balance

Note: Testing equipment required.
1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

Preparation:
- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
   CONTRAST } normal
   BRIGHTNESS }
2. Set the pattern generator raster signal to red.
3. Move the deflection yoke forward and adjust with the purity control so that the red is at the centre and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 - 3-3)
4. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
5. Switch the raster signal to blue, then to green and verify the condition.
6. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
7. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

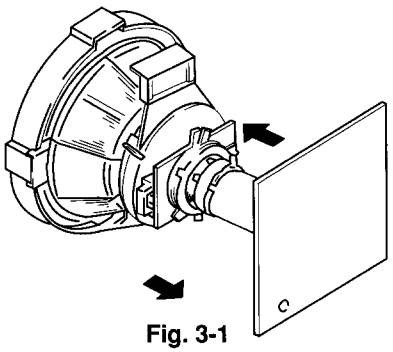


Fig. 3-1

Fig. 3-2

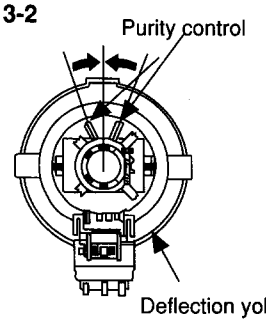
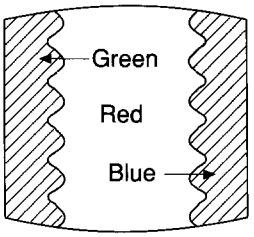


Fig. 3-3



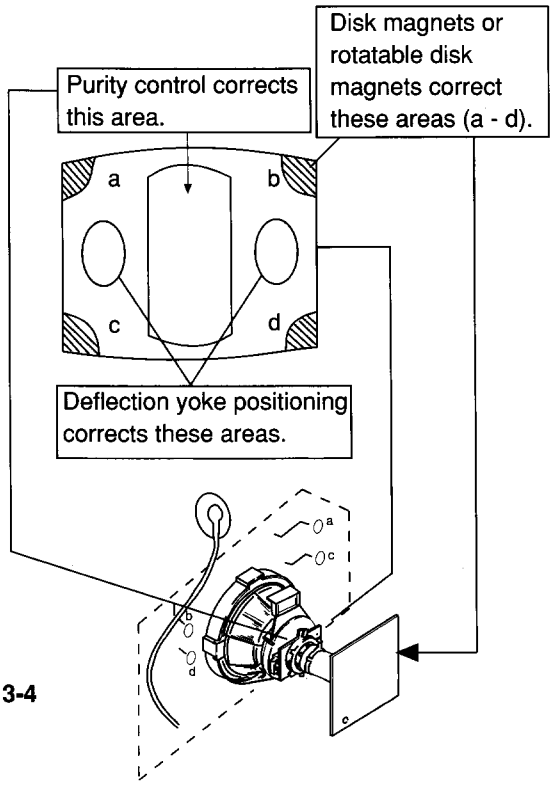


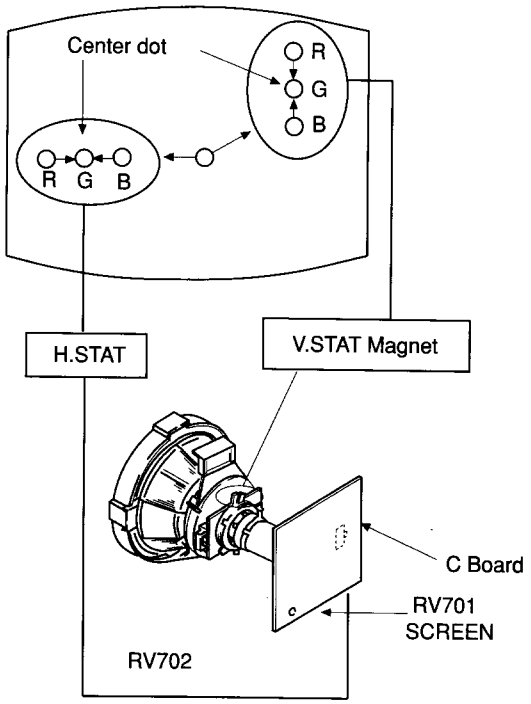
Fig. 3-4

3-2. CONVERGENCE

Preparation:

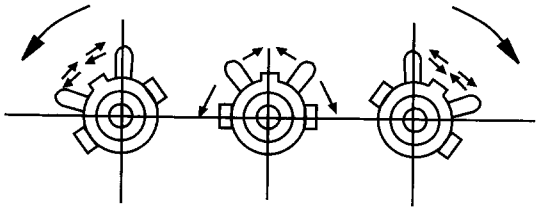
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

(1) Horizontal and vertical static convergence

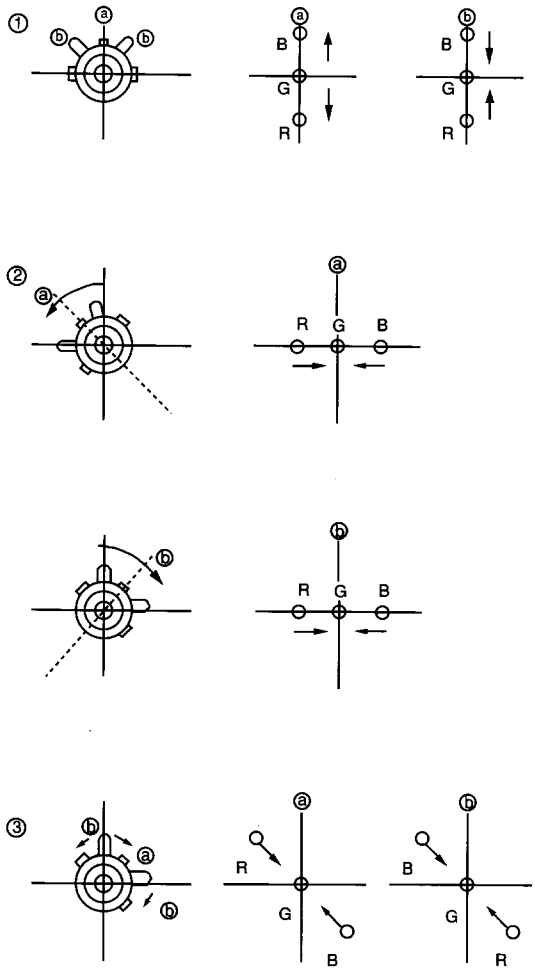


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the centre of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the centre of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the centre of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

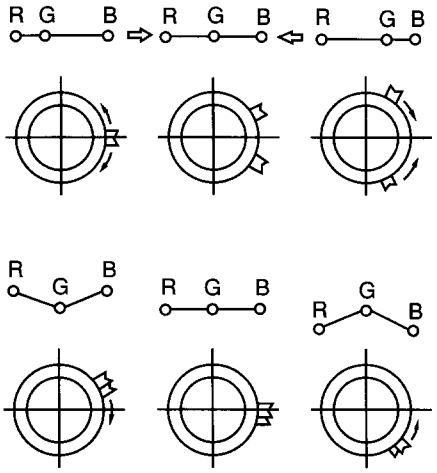
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

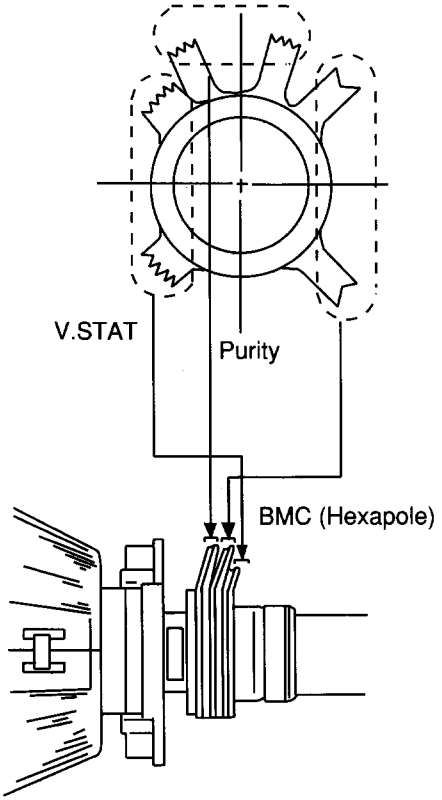


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet





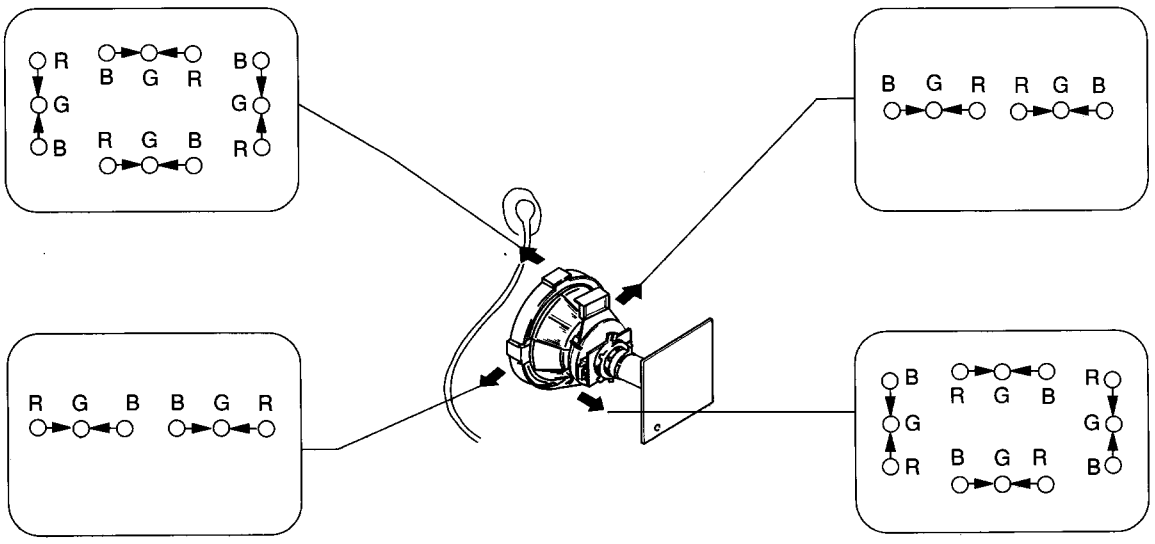
- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the centre of the screen (by moving the dots in the horizontal direction).

(2) Dynamic convergence adjustment.

Preparation:

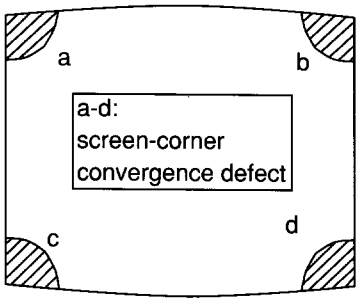
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

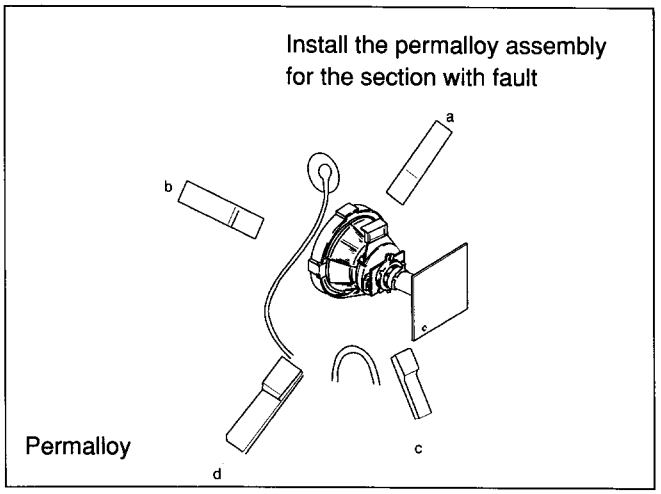
1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Re-install the deflection yoke spacer.



(3) Screen corner convergence.

If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.





3-3. WHITE BALANCE

G2 Setting

1. Switch the set into AV mode (apply no signal to the AV connectors).
2. Connect a Volt Meter to Test Point 1 on the A board.
3. Adjust RV01 to obtain a voltage of 3.0V ±0.3V.

White balance adjustment

1. Input an all white signal from the pattern generator.
2. Enter into the service mode.
3. Enter into Picture Adjustment service menu.
4. Select sub-contrast and adjust to 7.
5. Select the Green Drive and adjust so that the white balance becomes optimum.
6. Select the Blue Drive and adjust so that the white balance becomes optimum.
7. Press the TV button to return to TV operation.

PICTURE ADJUSTMENT

AFC mode	1
REF position	3
SCP BGR	1
SCP BGF	1
Trap Fo	7
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Sub hue	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	5

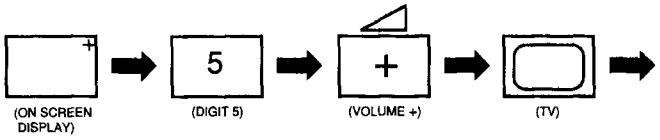
SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-862.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.



"TT-- " will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press MENU on the commander to obtain the following menu on the screen.

TEST MENU

> Picture adjustment
Geometry
Wide
MSP
IC status
Current TV status

4. Move to the corresponding adjustment using the ↓ button on the commander.
5. Press the + button to enter the selected adjustment.
6. Turn off the power to quit the service mode when adjustments are completed.

PICTURE ADJUSTMENT

AFC mode	1
REF position	3
SCP BGR	1
SCP BGF	1
Trap Fo	7
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Sub hue	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	5

GEOMETRY ADJUSTMENT

V Size	Adj
V Position	Adj
S Correction	Adj
V Linearity	Adj
H Size	Adj
H Position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	Adj
EHT H	Adj
Corner Pin	Adj

WIDE

V Aspect	43
V Scroll	31
Upper V Lin	0
Lower V Lin	0
Left Blanking	1
Right Blanking	11

MSP	
AGC ON/OFF	ON
Constant gain CDB	0
FM prescale FMP	36
Zwei mono-st WHI	36
Zwei st-mono WLO	18
Zwei mono-bi WMH	36
Zwei bi-mono WLO	18
Time zwei WML	41
Fawct limit	10
Fawct soll init FAW	12
Fawer tol	2
Nicam Err Max CCT	10
Nicam Err Min	0
Nicam Prescale NIP	97
Time Nicam	31
Carrier mute CRM	OFF
Audio clock ACO	HIZ
Scart prescale	25
Scart volume	64

IC STATUS (CXA2000 / CXA2040)	
CXA2000	
H lock	1
IKR	1
VNG	0
X-RAY	0
Colour system	3
CV1 Sync	1
CXA2040	
Sync sep	1
S1 mode pin	01
S2 mode pin	01
TUNER	
Tuner status	01101011

TV STATUS	
Text system	C TEXT/TV TEXT
Dolby	NO/YES
Text language set	WEST/EAST/RUSSIAN
Menu language set	WEST/EAST/RUSSIAN
Destination	B/D/U/K/L/E/A/R
Scart 16:9	OFF/ON
RGB priority	OFF/ON
Ageing	OFF/ON
Size	29/25
Colour trap sw	SECAM/ALL
Velocity mod	ON/OFF
AFT STATUS	WINDOW/HIGH/LOW

SUB BRIGHTNESS ADJUSTMENT

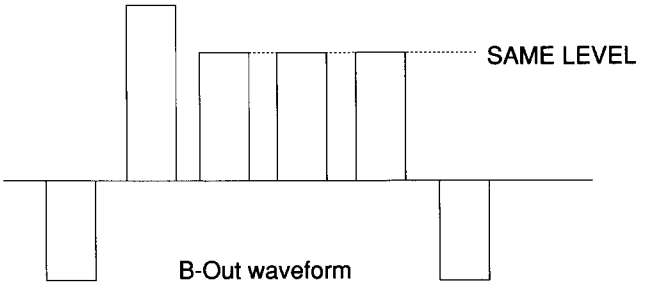
1. Input a Phillips pattern.
2. Set the picture control to minimum.
3. Enter into the Picture Adjustment Service Menu.
4. Adjust the Sub-Brightness data so that there is barely a difference between the 0 IRE and 10 IRE signal.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a black background.
2. Set the picture control to maximum.
3. Connect an oscilloscope to pin 3 of CN301 (A board).
4. Enter into the Picture Adjustment Service Menu.
5. Adjust the Sub-contrast data to obtain a black to white amplitude of 2.50 volts.

SUB COLOUR ADJUSTMENT

1. Receive a PAL Colour Bar video signal.
2. Connect an oscilloscope to pin 3 of CN301 (A board).
3. Enter into the Picture Adjustment Service Menu.
4. Adjust the sub colour data so that cyan, magenta and blue colour bars are of equal height.



NOTE: The data shown in the TV STATUS table is dependant on destination, screen size and country.

SYSTEM B/G, D/K, I & L I.F ADJUSTMENT

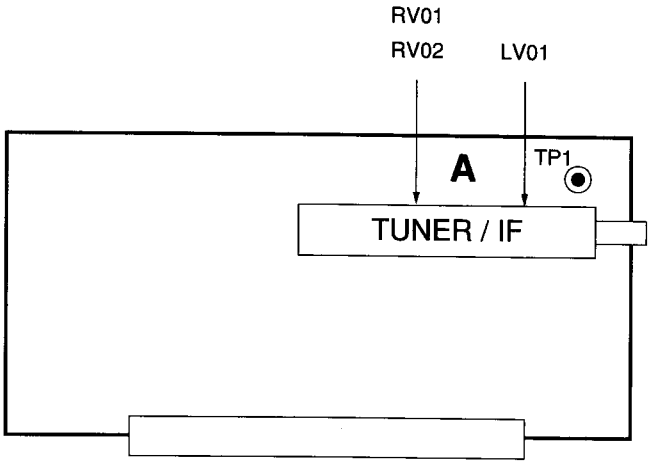
1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
2. Enter into the I.F adjustment service mode (i.e. " TT 59 ") to fix the I.F frequency to 38.9 MHz.
3. Enter into the service mode and select "Current TVStatus".
4. Adjust the I.F coil (LV01) until the "AFT Status" indicates a " Window " condition.

SYSTEM L BAND 1 I.F ADJUSTMENT

1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
2. Enter into the I.F adjustment service mode (i.e. " TT 59 ") to fix the I.F frequency to 34.2 MHz.
3. Enter into the service mode and select "Current TVStatus".
4. Adjust the RV02 until the "AFT Status" indicates a " Window " condition.

TUNER AGC ADJUSTMENT

1. Receive a signal of 63dBuV / 75 ohm terminated via the tuner socket.
2. Measure the voltage at test point 1 (A board).
3. Adjust RV01 to obtain a voltage of 3.0V ± 0.3V.



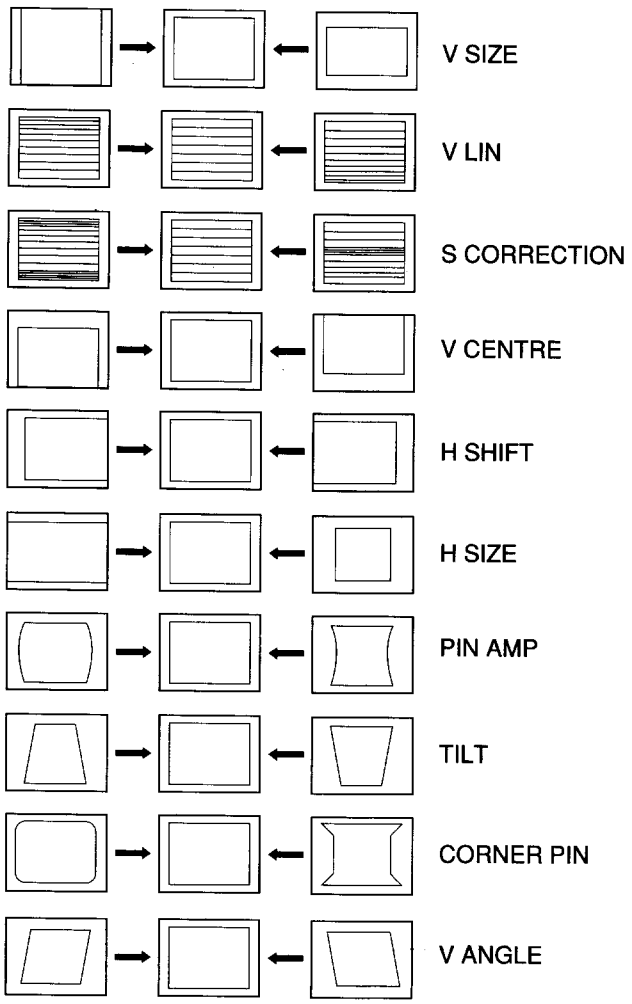
- A Board component side -

DEFLECTION SYSTEM ADJUSTMENT

1. Enter into the Geometry Adjustment Service Menu.
2. Select and adjust each item in order to obtain the optimum image.

GEOMETRY ADJUSTMENT

V Size	Adj
V Position	Adj
S Correction	Adj
V Linearity	Adj
H Size	Adj
H Position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	Adj
EHT H	Adj
Corner Pin	Adj



4-2. TEST MODE 2:

Is available by pressing Test button twice, OSD " TT " appears. The functions described below are available by pressing the two numbers. To release the Test mode 2, press 0 twice, or switch the TV into stand-by mode.

00	Switch test mode 2 off
01	Picture maximum
02	Picture minimum
03	Volume 30%
04	Set service menu mode
05	Set production menu mode
06	Volume 80%
07	Set ageing condition
08	Set shipping condition
09	Language reset
10	No function
11	Adjustment without OSD
12	Dummy
13	Display TV configuration
14	Forced AV 6:9 mode
15	Reset LPM from ROM data
16	copy LPM to reset memory
17	Preset label for AV sources
18	RGB priority on/off
19	Clear all preset labels
20	No function
21	Sub contrast
22	Sub colour
23	Sub brightness
24	Set destination = U
25	Set destination = D
26	Set destination = B
27	Set destination = K
28	Set destination = L
29	Set destination = E
30	No function
31	Set destination =A
32	Dummy
33	Auto AGC
34	Dummy
35	Manual AGC adjust

36-40	Dummy
41	Re-initialise NVM
42	Production use only
43	Initialise geometry settings
44	Initialise all favourite pages = 100
45	Channel locks = off
46	Dealer commander mode
47	Default MSP settings
48	Restore NVM test byte
49	Delete NVM test byte
50-60	No function
61	Turn on Dolby Pro Logic mode
62	White noise to left speaker
63	White noise to right speaker
64	White noise to centre speaker
65	White noise to rear speaker
66	Set standard stereo mode
67	Set Pro Logic normal mode
68	Set Pro Logic wide mode
69	Set Pro Logic phantom mode
70	No function
71	Picture rotation on/off
72	Dolby register settings
74	No function
75	Reset picture colour balance
76	Reset picture geometry
77	Reset sound settings
78	Reset error codes in the NVM
79-99	No function

4-3. BE-3D SELF DIAGNOSTIC SOFTWARE

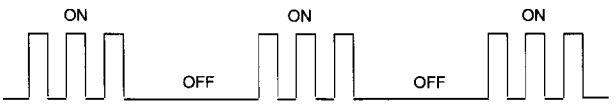
The identification of errors within the BE-3D chassis is triggered in 1 of 2 ways :- 1: Bus busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1, non fatal errors are reported with this method.

Table 1

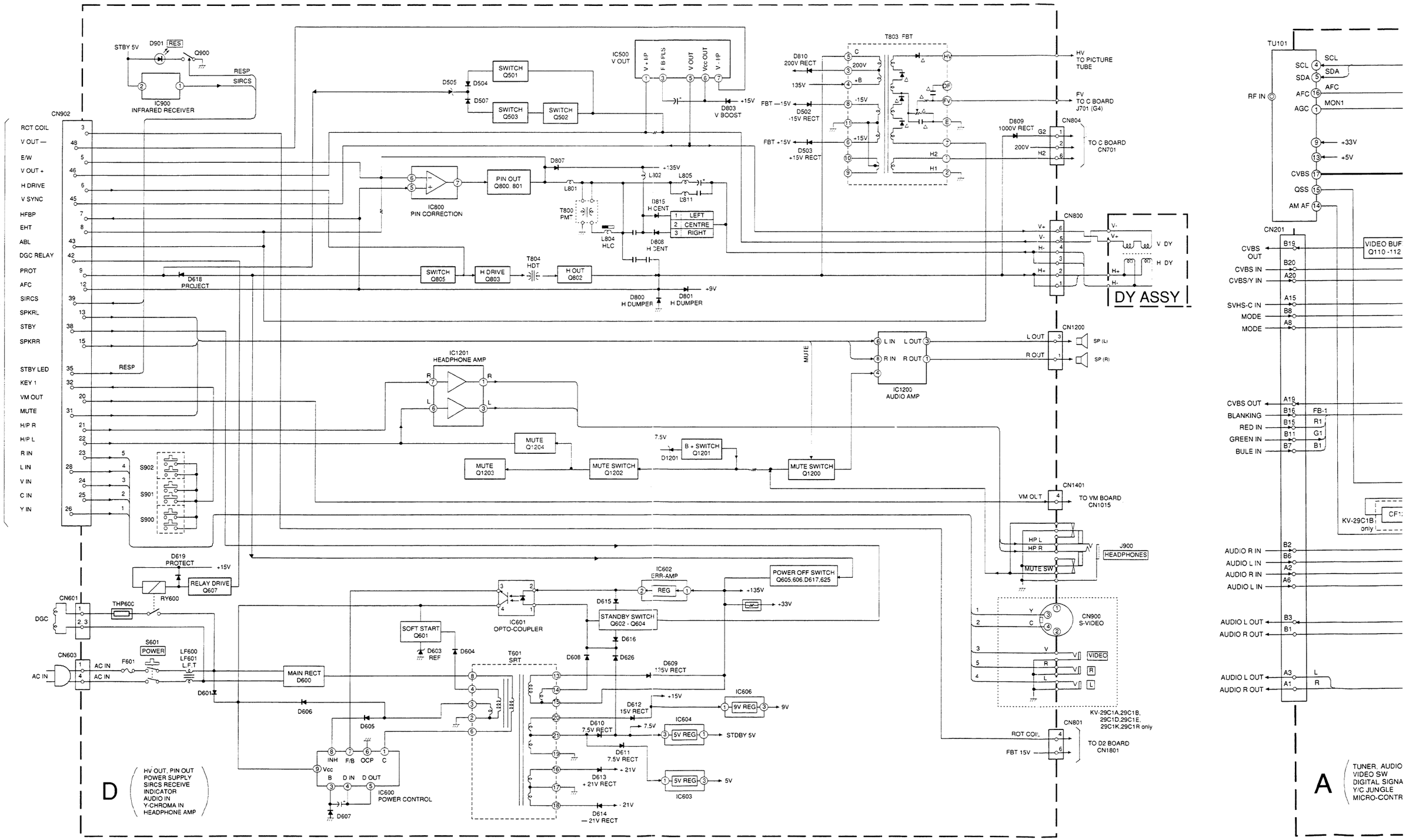
ERROR	LED ERROR COUNT
Protection circuit trip < ANY TIME >	02
IIC SCL LOW < POWER UP ONLY >	03
IIC SDA LOW < POWER UP ONLY >	04
IIC SDA & SCL LOW < POWER UP ONLY >	05
Jungle/Choroma controller no acknowledge < POWER UP ONLY >	06
Video Switch no acknowledge < POWER UP ONLY >	07
Tuner no acknowledge	08
MSP no acknowledge	09
NVM no acknowledge	10
M3L TXD LOW < POWER UP ONLY >	11
M3L RXD LOW < POWER UP ONLY >	12
M3L ENABLE LOW < POWER UP ONLY >	13
M3L TXD & RXD LOW < POWER UP ONLY >	14
Compact Text test fail < POWER UP ONLY >	15
AV switch cannot power on reset	16
Cannot initialise jungle	17
NVM acknowledge fail after initialisation	18
Multiple devices with no acknowledge < POWER UP ONLY >	19
Compacttext run-time failure	20
AVSWITCH response failure after power up	21
JUNGLE/CHROMA controller response failure after power up	22
CompactText does not respond	23

Flash Timing Example : e.g. error number 3.

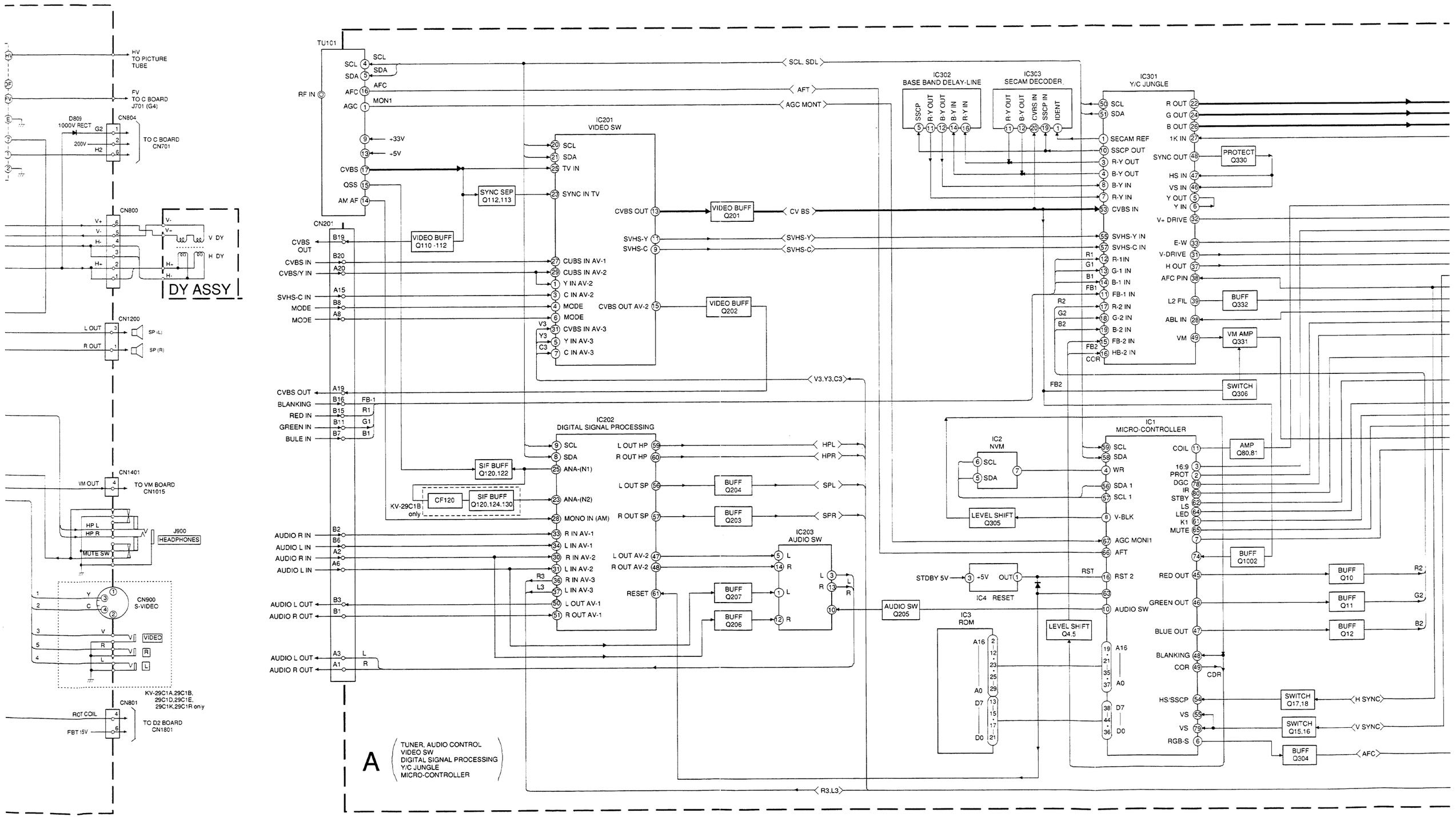
Stby LED

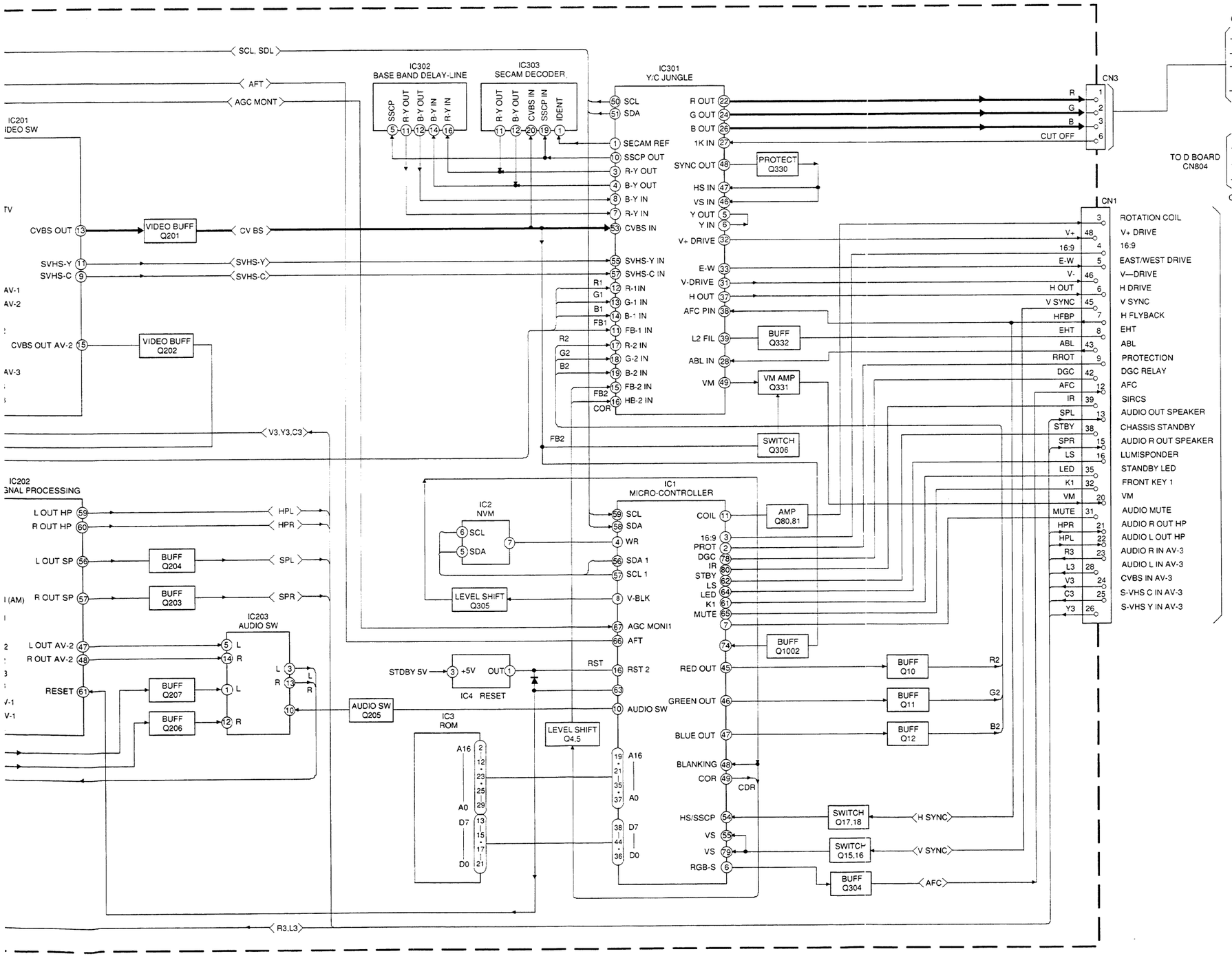


5-1. BLOCK DIAGRAM (1)

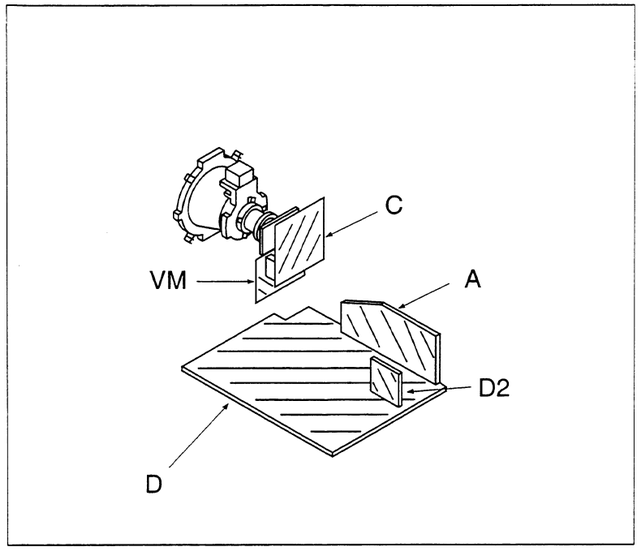


BLOCK DIAGRAM (2)




SCL, SDL
AFT
AGC MONT
IC201
IDEO SW
TV
CVBS OUT 13
VIDEO BUFF Q201
CV BS
SVHS-Y 11
SVHS-C 9
SVHS-Y
SVHS-C
AV-1
AV-2
CVBS OUT AV-2 15
VIDEO BUFF Q202
AV-3
V3,Y3,C3
IC202
GNAL PROCESSING
L OUT HP 59
R OUT HP 60
HPL
HPR
L OUT SP 56
BUFF Q204
SPL
I (AM) R OUT SP 57
BUFF Q203
SPR
IC203
AUDIO SW
L OUT AV-2 47
R OUT AV-2 48
RESET 61
BUFF Q207
BUFF Q206
AUDIO SW Q205
R3,L3
IC302
BASE BAND DELAY-LINE
SSCP
R Y OUT
B Y OUT
B Y IN
R Y IN
IC303
SECAM DECODER
R-Y OUT
B-Y OUT
CVBS IN
SSCP IN
IDENT
IC301
Y/C JUNGLE
SCL
SDA
SECAM REF
SSCP OUT
R-Y OUT
B-Y OUT
B-Y IN
R-Y IN
CVBS IN
SVHS-Y IN
SVHS-C IN
R-1IN
G-1 IN
B-1 IN
FB-1 IN
R-2 IN
G-2 IN
B-2 IN
FB-2 IN
HB-2 IN
R OUT
G OUT
B OUT
1K IN
SYNC OUT
PROTECT Q330
HS IN
VS IN
Y OUT
Y IN
V+ DRIVE
E-W
V-DRIVE
H OUT
AFC PIN
L2 FIL
BUFF Q332
ABL IN
VM
VM AMP Q331
SWITCH Q306
IC2
NVM
LEVEL SHIFT Q305
IC1
MICRO-CONTROLLER
WR
SDA 1
SCL 1
V-BLK
AGC MONI
AFT
RST
RST 2
AUDIO SW
IC4 RESET
STDBY 5V
+5V
IC3
ROM
LEVEL SHIFT Q4,5
A16
A0
D7
D0
COIL
16:9
PROT
DGC
IR
STBY
LS
LED
K1
MUTE
AMP Q80,81
BUFF Q1002
RED OUT
GREEN OUT
BLUE OUT
BLANKING
COR
CDR
HS/SSCP
VS
RGB-S
BUFF Q10
BUFF Q11
BUFF Q12
R2
G2
B2
SWITCH Q17,18
SWITCH Q15,16
BUFF Q304
H SYNC
V SYNC
AFC
CN3
CUT OFF
CN1
ROTATION COIL
V+ DRIVE
16:9
EAST/WEST DRIVE
V—DRIVE
H DRIVE
V SYNC
H FLYBACK
EHT
ABL
PROTECTION
DGC RELAY
AFC
SIRCS
AUDIO OUT SPEAKER
CHASSIS STANDBY
AUDIO R OUT SPEAKER
LUMISPONDER
STANDBY LED
FRONT KEY 1
VM
AUDIO MUTE
AUDIO R OUT HP
AUDIO L OUT HP
AUDIO R IN AV-3
AUDIO L IN AV-3
CVBS IN AV-3
S-VHS C IN AV-3
S-VHS Y IN AV-3
TO D BOARD CN902
CN703
R DRIVE, BKG Q702, 703
G DRIVE, BKG Q705, 706
B DRIVE, BKG Q708, 709
CUT OFF Q711
R OUT Q704
G OUT Q707
B OUT Q710
D701
V901 PICTURE TUBE
H RCV G2 G4 HV
TO D BOARD CN804
CN701
+ 200V
D711 PROTECT
H1
H2
RCV
RV702 H STAT
RV701 SCREEN
G2 (1000V)
C (RGB OUT)
TO D BOARD T803 (FBT)
VM (VM AMP)
CN1718
CN1015
TO D BOARD CN1401
VM OUT
VM AMP Q1701, 1702, 1708, 1709
VM AMP BUFFER Q1704
VM OUT Q1703, 1706
DRIVE SW Q1707
+9V
135V
GND
CP
NECK ASSY
D2 (ROTATION AMP)
CN1301
TO D BOARD CN801
ROTATION
FBT 15V
IC1802
ROTATION AMP
ROT +
ROT -
CN1803
TO ROTATION COIL
IC1801
9V REG

5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
  k = 1000 , M = 1000K
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power ¼ W

- : nonflammable resistor.
- : internal component.
- : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊥ : earth - ground.
- ⏚ : earth - chassis.
- # : no mounted.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

Note : Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

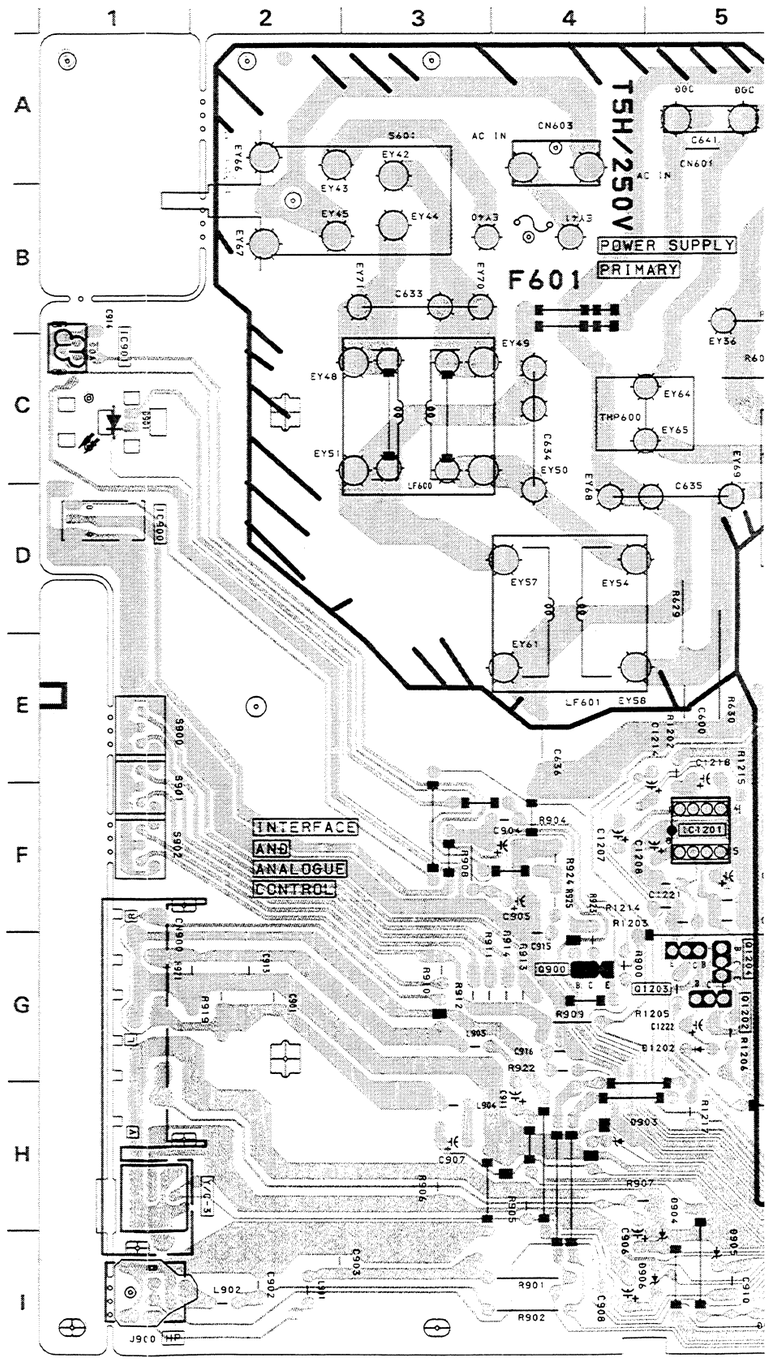
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ※	ADJUSTABLE RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

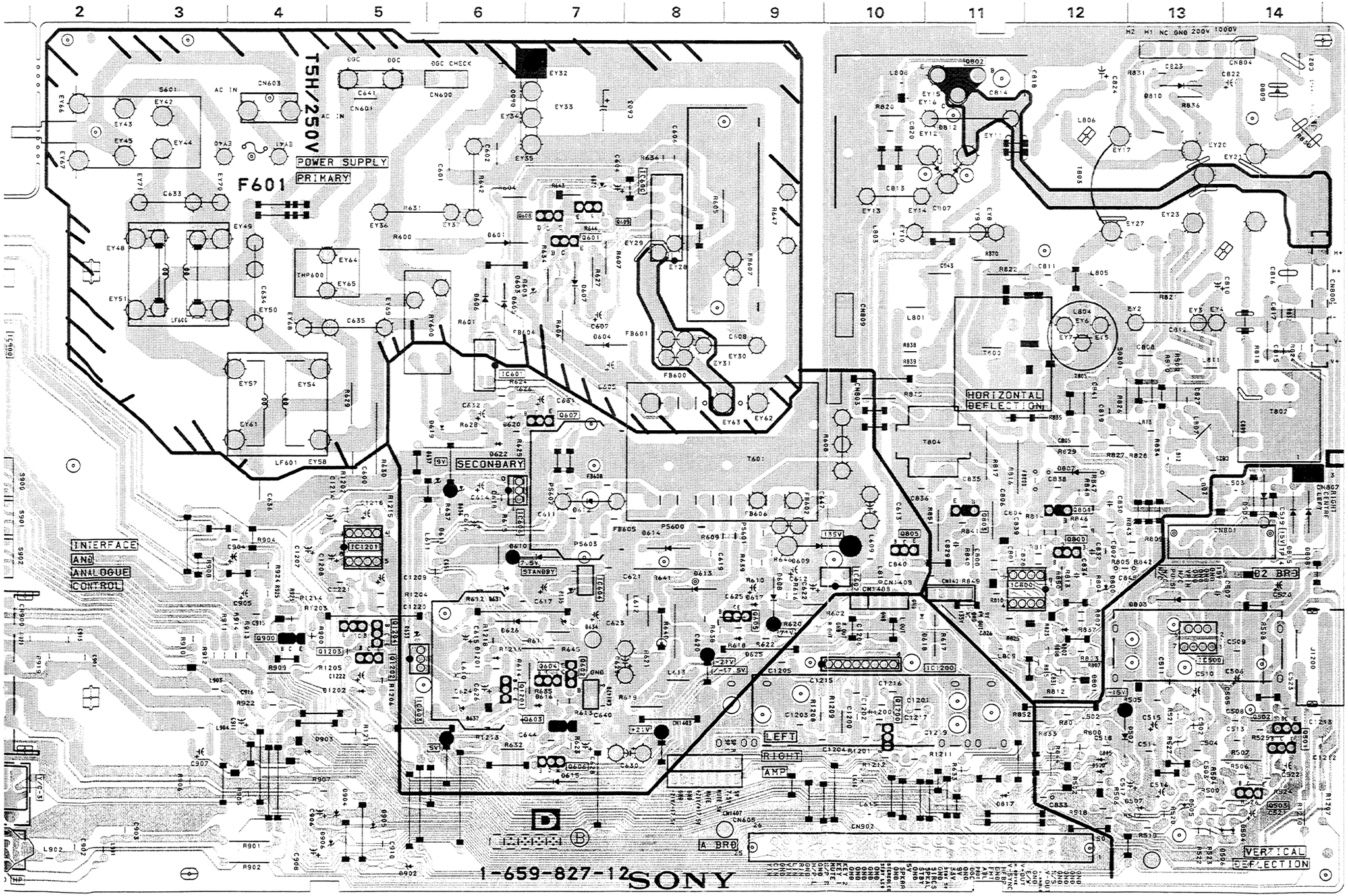
- Readings are taken with a colour-bar signal input.
- Readings are taken with 10MΩ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
- ——— : B+ bus.
- : signal path. (RF)

D [HV CUT, PIN OUT, POWER SUPPLY, CONTROL SW, AUDIO IN
Y-CHROMA IN, HEADPHONE IN. SIRCS RECEIVE, INDICAITON]

D Board



UT, PIN OUT, POWER SUPPLY, CONTROL SW, AUDIO IN
ROMA IN, HEADPHONE IN, SIRCS RECEIVE, INDICAITON

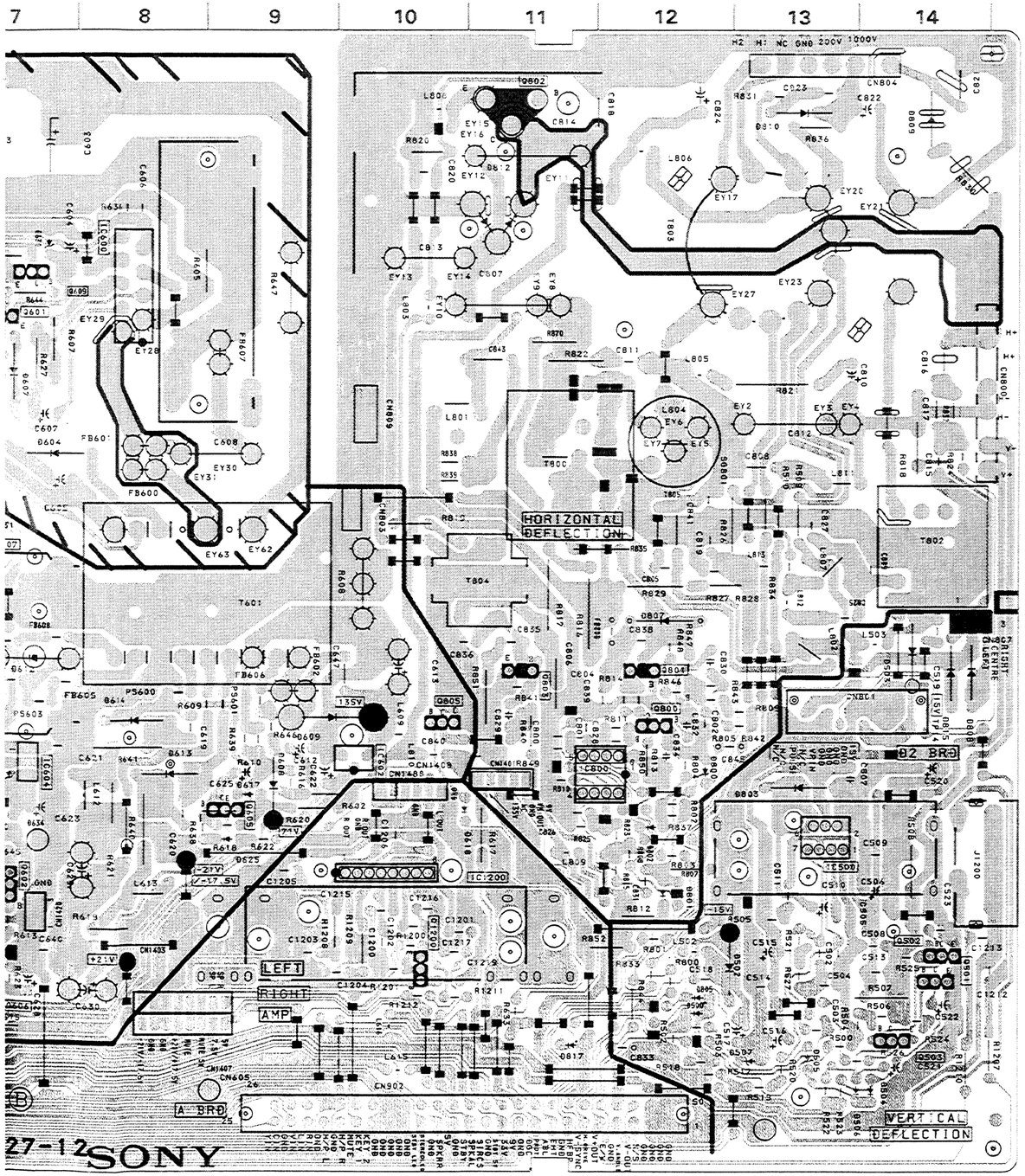


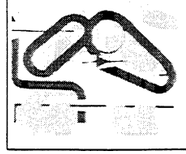
D BOARD

IC
IC500
IC600
IC601
IC602
IC603
IC604
IC606
IC800
IC900
IC1200
IC1201

TRANSIS
Q501
Q502
Q503
Q601
Q602
Q603
Q604
Q605
Q606
Q607
Q800
Q801
Q802
Q803
Q805
Q900
Q1200
Q1201
Q1202
Q1203
Q1204

DIOD
D500
D502
D503
D504
D505
D506
D507

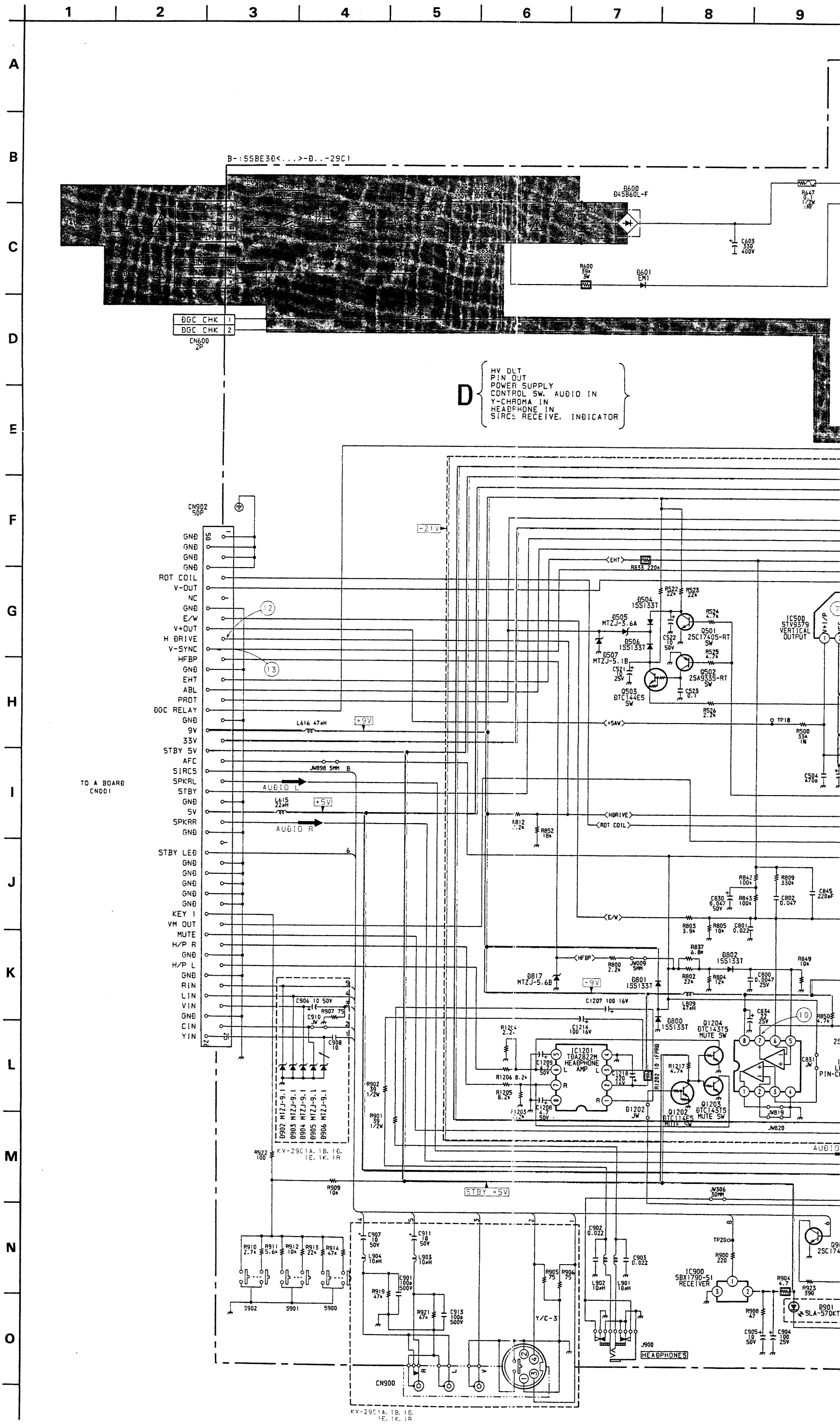




NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

D BOARD

IC		DIODE	
IC500	G-13	D600	A-7
IC600	B-8	D601	C-6
IC601	D-6	D603	C-7
IC602	F-10	D604	D-7
IC603	G-5	D605	C-6
IC604	F-7	D606	C-6
IC606	E-6	D607	C-7
IC800	F-12	D608	F-9
IC900	D-1	D609	F-9
IC1200	G-10	D610	F-7
IC1201	F-5	D611	F-6
		D612	E-7
TRANSISTOR		D613	F-8
Q501	H-14	D614	F-8
Q502	H-14	D615	H-7
Q503	H-14	D616	G-7
Q601	C-7	D617	F-9
Q602	G-7	D618	F-11
Q603	H-7	D619	E-6
Q604	G-7	D620	E-6
Q605	F-9	D622	E-6
Q606	H-7	D625	G-9
Q607	D-7	D626	G-6
Q800	F-12	D631	F-6
Q801	E-12	D800	F-12
Q802	A-11	D801	G-12
Q803	E-11	D802	G-12
Q805	F-10	D803	F-13
Q900	G-4	D807	E-12
Q1200	H-10	D808	E-14
Q1201	G-6	D809	A-14
Q1202	G-5	D810	A-13
Q1203	G-5	D812	B-11
Q1204	G-5	D815	E-14
DIODE		D817	H-11
D500	H-12	D901	C-1
D502	H-13	D902	I-5
D503	I-14	D903	H-4
D504	H-11	D904	H-5
D505	H-13	D905	I-5
D506	I-14	D906	I-5
D507	H-13	D1201	G-6


B-:SSBE30<...>-0..-29C1
D600 D45B60L-F
R647 0.1 1/2W :RF
C603 330 400V
R600 SGx SW
D601 EM1
0GC CHK 1
0GC CHK 2
CN600 2P
D
HV OUT
PIN OUT
POWER SUPPLY
CONTROL SW. AUDIO IN
Y-CHROMA IN
HEADPHONE IN
SIRCS RECEIVE. INDICATOR
CN902 50P
GND
ROT COIL
V-OUT
NC
E/W
V+OUT
H DRIVE
V-SYNC
HFBP
EHT
ABL
PROT
DGC RELAY
9V
33V
STBY 5V
AFC
SIRCS
SPKRL
STBY
5V
SPKRR
STBY LED
KEY 1
VM OUT
MUTE
H/P R
H/P L
RIN
LIN
VIN
CIN
YIN
TO A BOARD CN001
-21V
EHT
R833 220k
R522 22k
R523 22k
D504 1SS133T
D505 MTZJ-3.6A
D506 1SS133T
D507 MTZJ-5.1B
Q501 2SC1740S-RT SW
Q502 2SA933S-RT SW
Q503 DTC144ES SW
C522 10 50V
C523 0.1
C521 10 25V
R524 4.7k
R525 4.7k
R526 2.2k
IC500 STV9379 VERTICAL OUTPUT
V+I/P
TP18
R500 33k 1%
C504 470P
+SAW
L616 47uH
+9V
JW898 5MM
AUDIO L
L615 22uH
+5V
AUDIO R
HDRIVE
ROT COIL
R812 2.2k
R852 18k
R842 100k
R809 330k
C845 220pF
C830 0.047 50V
R843 100k
C802 0.047
E/W
R803 3.9k
R805 10k
C801 0.022
R837 6.8k
D802 1SS133T
R849 10k
HFBP
R800 2.2k
JW009 5MM
D817 MTZJ-5.6B
+9V
D801 1SS133T
R802 22k
R804 12k
C800 0.0047 25V
C1207 100 16V
L809 47uH
D800 1SS133T
Q1204 DTC143TS MUTE SW
C834 22 25V
R850 4.7k
R1204 2.2k
C1214 100 16V
IC1201 TDA2822M HEADPHONE AMP
C1209 4.7 50V
C1208 4.7 50V
C1218 220 16V
R1206 8.2k
R1205 8.2k
R1203 2.2k
R1202 10 :FPRD
D1202 JW
Q1202 DTC114ES MUTE SW
Q1203 DTC143TS MUTE SW
R1217 4.7k
C831 JW
JW819
JW820
R902 39 1/2W
R901 39 1/2W
C906 10 50V
R907 75
C910 JW
C908 10
D902 MTZJ-9.1
D903 MTZJ-9.1
D904 MTZJ-9.1
D905 MTZJ-9.1
D906 MTZJ-9.1
KV-29C1A. 1B. 1D. 1E. 1K. 1R
R922 100
R909 10k
STBY +5V
JW306 30MM
AUDIO
R910 2.7k
R911 5.6k
R912 10k
R913 22k
R914 47k
S902
S901
S900
C907 10 50V
C911 10 50V
L904 10uH
L903 10uH
C901 100p 500V
R919 47k
R921 47k
C913 100p 500V
R905 75
R906 75
Y/C-3
CN900
KV-29C1A. 1B. 1D. 1E. 1K. 1R
C902 0.022
C903 0.022
L902 10uH
L901 10uH
J900
HEADPHONES
TP20
R900 220
IC900 SBX1790-51 RECEIVER
R904 4.7
R923 390
D901 SLA-570KT
R908 47
C905 10 50V
C904 100 25V

8 9 10 11 12 13 14 15 16 17 18 19

IC600 PHOTO-COUPLER ISOLATOR

IC602 SE135N ERR-AMP

IC606 LM2940CT-9.0 +9V REG

IC603 LM2940CT-5.0 +5V REG

IC604 L4941BV +5V REG

IC600 STR-S6708 POWER-CONTROL

IC500 STV9379 VERTICAL OUTPUT

IC800 LM393P PIN-CORRECTION

IC1200 TBA7264 AUDIO-AMP

Q601 2SC3852A 7V REG

Q602 2SA1667 STBY SW

Q603 2SC3502-E STBY SW

Q604 2SC2808STP STBY SW

Q605 2SC1740S-RT PROTECTION

Q606 DTA144ES PROTECTION

Q607 2SC1740S-RT RELAY DRIVE

Q501 7405-RT SW

Q502 B335-RT SW

Q800 2SC1740S-RT PIN-OUT

Q801 2SC4793 PIN OUT

Q802 2SC4927-01 H-OUT

Q803 2SC2688-LK H-DRIVE

Q805 DTC144ES SW

Q1200 2SC1740S-RT MUTE SW

Q1201 DTC143TS-TP MUTE SW

Q1203 DTC143TS MUTE SW

Q1204 DTC143TS MUTE SW

Q900 2SC1740S-RT

D601 RGP10GPKG23

D602 EU-1

D603 MTZJ-6.8B

D604 EU-1

D605 RGP10GPKG23

D606 RGP10GPKG23

D607 EG-1Z

D608 EUZ-V

D609 RU4AM

D610 AU-01Z

D611 FML-G12S

D612 RU3YX-LF-C4

D613 FML-G12S

D614 FML-G12S

D615 EU-1

D616 MTZJ-7.5C

D618 1SS133T

D619 1SS133T

D620 1SS133T

D622 MTZJ-9.1

D625 1SS133T

D626 AU-01Z

D631 MTZJ-6.2B

D500 MTZJ-5.6B

D501 GP08D

D502 RGP15GPKG23

D503 RGP15GPKG23

D803 GP08D

D807 RGP10GPKG23

D808 GP08D

D809 RGP02-20EG23

D810 RGP10GPKG23

D812 FMS-3FU

D815 GP08D

D901 SLA-570KT3F

D1201 MTZJ-3.9B

CN804 6P WHT
1 +1000V
2 +200V
3 GND
4 NC
5 H1
6 H2

CN1401 5P
1 +135V
2 NC
3 GND
4 VM OUT
5 +9V

CN803 1P
1 GND

CN801 10P
1 +15V PULSE
2 GND
3 GND
4 ROT COIL
5 GND
6 FBT +15V
7 GND
8 GND
9 GND
10 V-OUT

CN800 6P :BY
6 V+
5 V-
4 H-
3 H-
2 H+
1 H+

CN1420 3P BLK S:MICRO
1 GND
2 GND
3 GND

CN1408 4P :S-MICRO
4 GND
3 L OUT
2 GND
1 R OUT

CN807 3P S:MICRO
RIGHT
CENTRE
LEFT

+135V +200V +9V +15V -15V +21V -21V +5V STBY +5V 5V 33V ABL

V SYNC H.CENT

HV TO CRT

TO C BOARD FV

TO C BOARD CN701

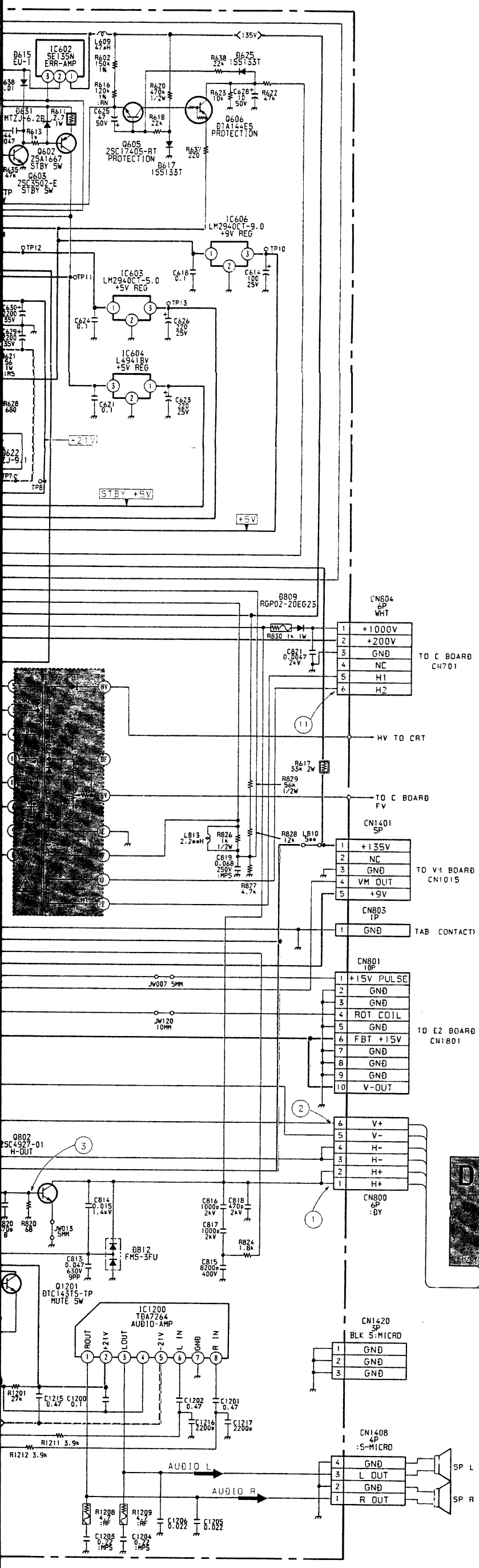
TO V1 BOARD CN101

TO E2 BOARD CN181

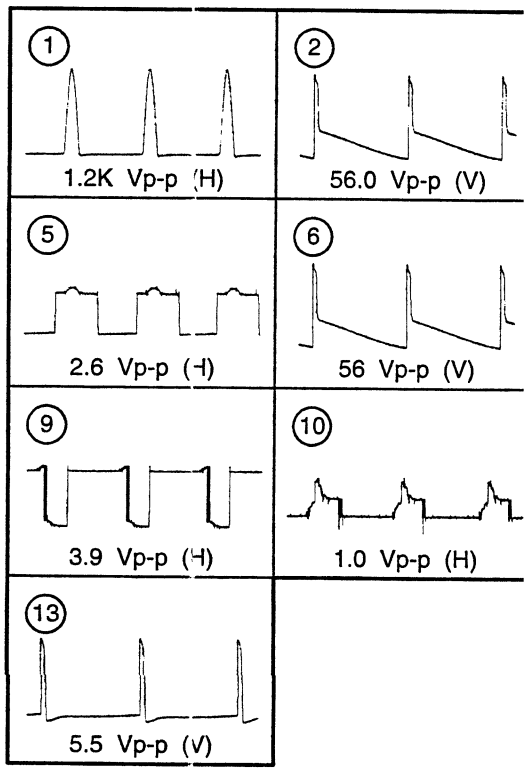
TAB CONN

AUDIO L AUDIO R

KV-29C1A, 1B, 1D, 1E, 1K, 1R



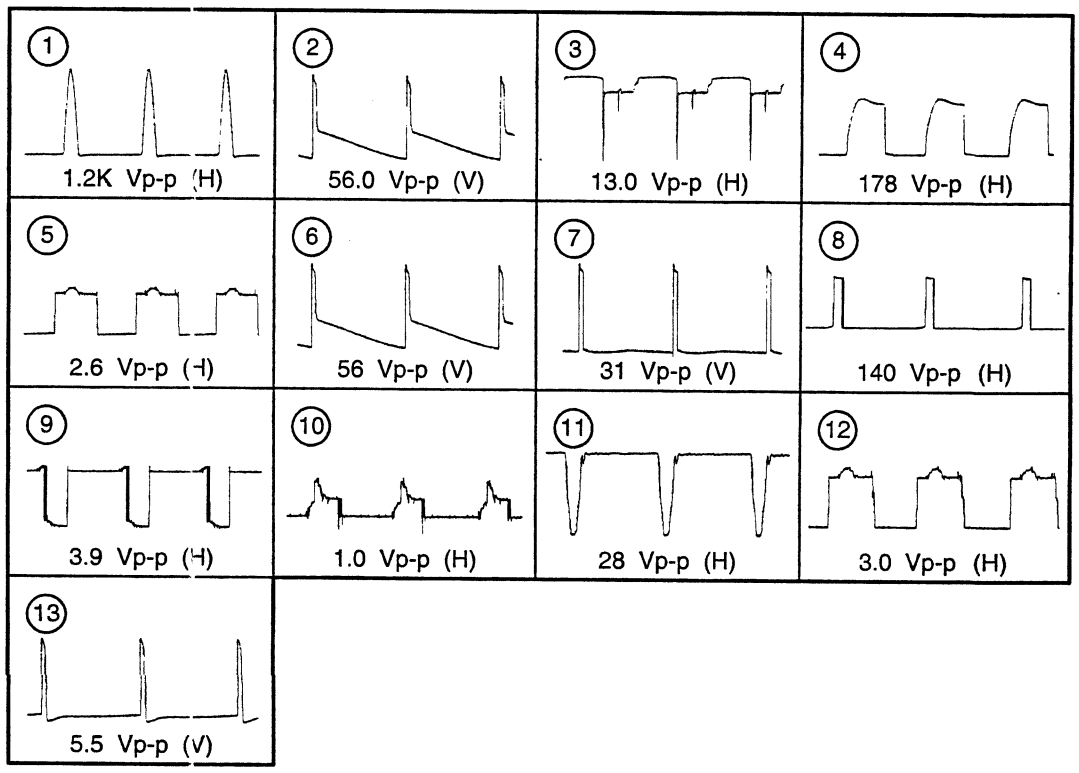
WAVEFORMS D BOARD



D BOARD
TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q501	-0.1	0.2	-
Q502	0.1	-5.8	-
Q503	-5.8	-12.0	-12.0
Q602	72.0	7.5	72.7
Q603	0	72.0	-
Q604	0.7	-	-
Q605	0.5	-	0.3
Q606	-	-	12.0
Q607	-	12.0	-
Q800	0.2	3.1	-
Q801	0.3	17.0	-
Q802	-0.2	143.3	-
Q803	-0.6	99.8	-
Q805	-	3.6	-
Q900	-	5.4	-
Q1200	2.9	21.5	4.6
Q1201	3.4	5.0	3.0
Q1202	2.8	-	-

WAVEFORMS D BOARD

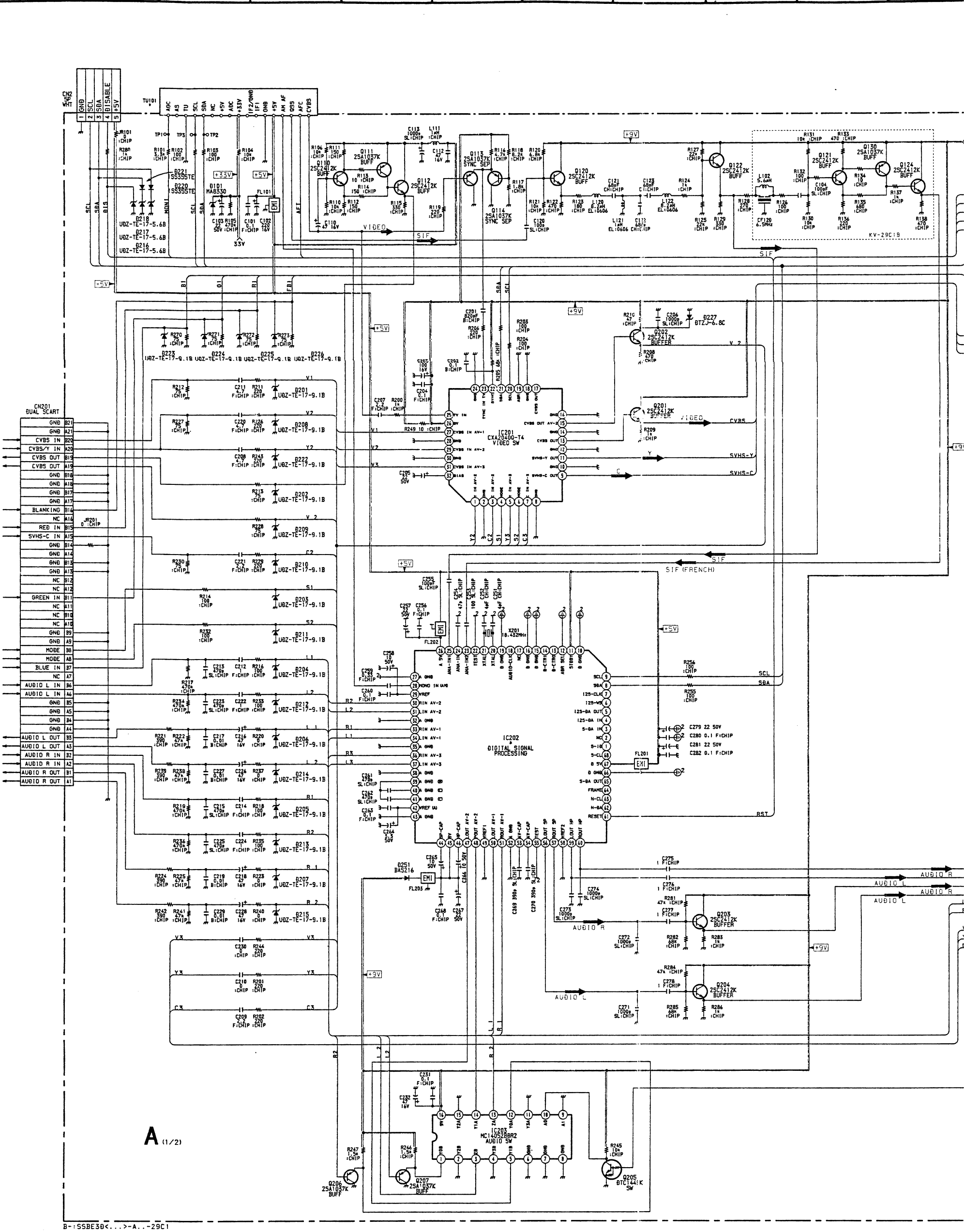


D BOARD
TRANSISTOR VOLTAGE TABLE

Transistor Vo tage Table			
Ref No	B Base	C Collector	E Emitter
Q501	-0.1	0.2	-
Q502	0.1	-5.8	-
Q503	-5.8	-12.0	-12.0
Q602	72.0	7.5	72.7
Q603	0	72.0	-
Q604	0.7	-	-
Q605	0.5	-	0.3
Q606	-	-	12.0
Q607	-	12.0	-
Q800	0.2	3.1	-
Q801	0.3	17.0	-
Q802	-0.2	143.3	-
Q803	-0.6	99.8	-
Q805	-	3.6	-
Q900	-	5.4	-
Q1200	2.9	21.5	4.6
Q1201	3.4	5.0	3.0
Q1202	2.8	-	-

D BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC500	1	1.5
	2	15.0
	3	-12.3
	4	-14.0
	5	0.1
	6	15.2
	7	1.4
IC600	1	170.0
	2	-62.4
	3	-62.6
	4	-62.2
	5	-62.0
	6	-62.6
	7	-62.4
	8	-62.0
	9	-58.0
IC601	1	64.3
	2	63.0
	3	-62.5
	4	-58.6
IC602	1	135.0
	2	63.2
	3	-0.1
IC800	3	0.9
	5	1.5
	6	2.0
	7	0.2
	8	9.0
IC1200	2	21.7
	4	21.5
	5	-21.7
IC1201	1	4.0
	2	9.0
	3	4.0
	5	0.5
	8	0.5



A BOARD * MARK

Ref. No. \ Model	29C1A	29C1B	29C1D	29C1D 1	29C1E	29C1K	29C1R
C19	—	—	—	—	—	0.033MF	0.033MF
C370	—	2.2UF	2.2UF	2.2UF	2.2UF	2.2UF	2.2UF
C372	—	0.1UF	0.1UF	0.1UF	0.1UF	0.1UF	0.1UF
C373	—	0.22UF	0.22UF	0.22UF	0.22UF	0.22UF	0.22UF
D370	—	BAS216	BAS216	BAS216	BAS216	BAS216	BAS216
IC202	MSP3400C-P5	MSP3410-15	MSP3400C-PS	MSP3400C-PS	MSP3410-15	MSP3400C-PS	MSP3400C-PS
IC303	—	TDA8395T	TDA8395T	TDA8395T	TDA8395T	TDA8395T	TDA8395T
R51	—	—	—	—	—	4.7K	4.7K
TU101	TUVIF (AEP)	TUVIF (FR)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)

B-:SSBE30<...>-A...-29C1

A (2/2) { TUNER. AUDIO CONTROL VIDEO SW.
DIGTAL SIGNAL PROCESSING
Y/C JUNGLE MICRO CONTROLLER }

KV-29C1B

+9V
R131 10k :CHIP
R133 470 :CHIP
Q130 2SA1037K BUFF
Q121 2SC2412K BUFF
Q124 2SC2412K BUFF
R132 100 :CHIP
R134 10 :CHIP
C104 100aF SL:CHIP
R137 1k :CHIP
R135 680 :CHIP
R130 10k :CHIP
R136 220 :CHIP
R138 470 :CHIP

BIS ← U-PC DISABLE
HREQ ← HREQ
RST ← RST
AFT ← AFT
MONI ← AGC MONI
SDA ← SDA
SCL ← SCL

R1 ← R AV-1
G1 ← G AV-1
B1 ← B AV-1
FB1 ← FB AV-1

CVBS ← CVBS
SVHS-Y ← SVHS-Y
SVHS-C ← SVHS-C

HP R ← AUDIO R
HP L ← AUDIO L
SP R ← AUDIO R
SP L ← AUDIO L

L3 ← AUDIO L AV-3
R3 ← AUDIO R AV-3

Y3 ← CVBS AV-3
Y3 ← Y AV-3
C3 ← C AV-3

AUDIO SW

SDA ← SDA
SCL ← SCL
AUDIO SW ← AUDIO SW
HREQ ← HREQ
RST ← RST
AFT ← AFT
AGC MONI ← MONI
U-PC DISABLE ← BIS

VIDEO
CVBS ← CVBS
SVHS-Y ← SVHS-Y
SVHS-C ← SVHS-C

R AV-1 → R367 100 :CHIP R1
G AV-1 → R368 100 :CHIP G1
B AV-1 → R369 100 :CHIP B1
FB AV-1 → R355 220 :CHIP FB1

CN301 7P WHT
RED DRIVE 1 ← R
GRN DRIVE 2 ← G
BLUE DRIVE 3 ← B
+9V 4
GND 5
CUT OFF 6 ← IK
GND 7
TO C BOARD CN703

IC303 SECAM DECODER
C373 C372 C371 1000p SL:CHIP C370
D370
R370 0 :CHIP
R316 220 :CHIP
Q304 2SC2412K BUFF
Q305 2SC2412K LEVEL SHIFT
C358 0.47 F:CHIP
C360 5p CH:CHIP C359 15p CH:CHIP C357 470u +SL:CHIP
X302 3.58MHz X301 4.43MHz
R351 1.5k :CHIP R350 510 :CHIP R352 15k :CHIP
C355 22 50V C356 0.01

R315 0 :CHIP
R301 220 :CHIP
R544 5.6k :CHIP
R302 0 :CHIP R303 0 :CHIP
C301 0.1 F:CHIP
C304 0.1 F:CHIP
C305 0.1 F:CHIP
C317 0.1 F:CHIP
R314 0 :CHIP R313 0 :CHIP
C302 1000p SL:CHIP C303 1000p SL:CHIP

IC301 CXA2000Q-TL Y CHROMA JUNGLE
SECAM REF
GND
R-Y OUT
B-Y OUT
Y OUT
Y IN
R-Y IN
B-Y IN
GND
SSCP OUT
FB-1 IN
R-1 IN
G-1 IN
B-1 IN
FB-2 IN
HB-2 IN
R-2 IN
G-2 IN
B-2 IN
R308 100 :CHIP
C306 0.01 B:CHIP
C307 0.01 B:CHIP
C308 0.01 B:CHIP
R309 220 :CHIP
R310 220 :CHIP
C309 1 B:CHIP
C310 1 B:CHIP
C311 1 B:CHIP

IC302 TDA4665T-T BASEBAND DELAY-LINE
C312 2.2
C313 1000p
R311 0 :CHIP R312 0 :CHIP
C315 0 :CHIP
C320 22 50V
C321 0.01 B:CHIP C322 0.1 B:CHIP C323 0.1 B:CHIP C324 0.1 B:CHIP
R320 100 :CHIP R321 100 :CHIP R322 100 :CHIP
C325 1 F:CHIP
R323 220 :CHIP

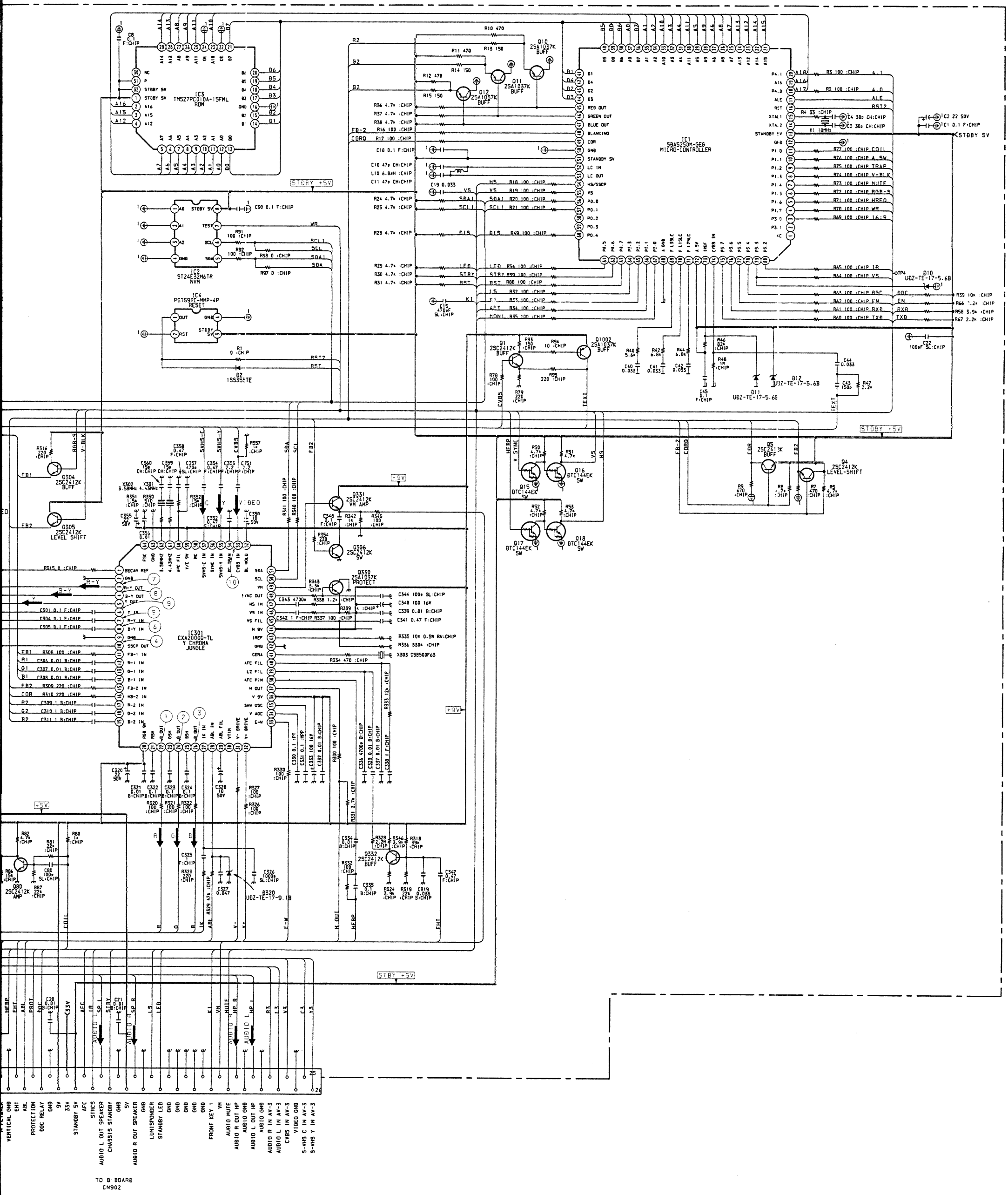
+9V +5V

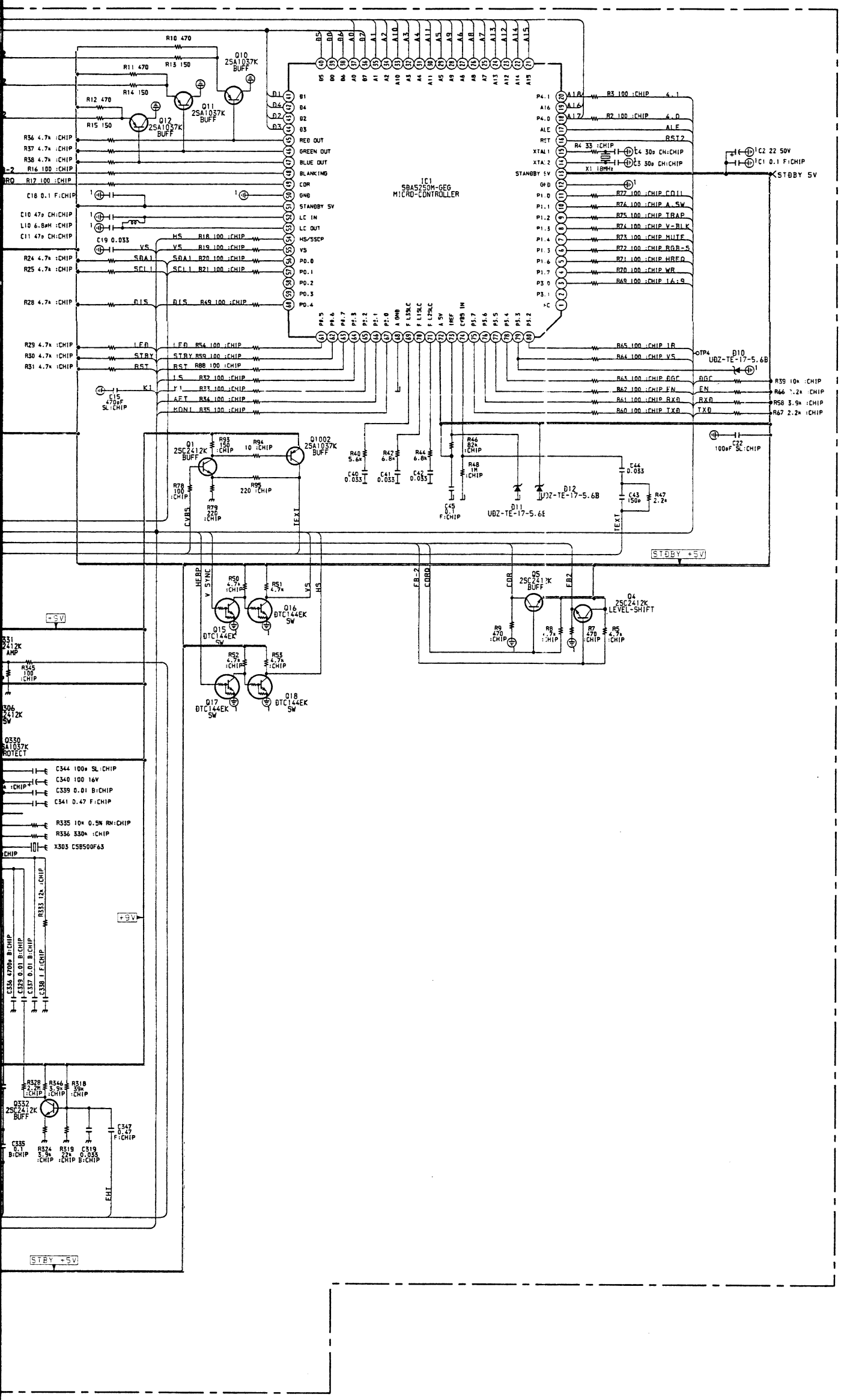
Q81 2SA1037K AMP
R85 10k :CHIP R84 22k :CHIP R83 10k :CHIP
R82 4.7k :CHIP R81 22k :CHIP R80 1k :CHIP
C82 0.022 B:CHIP C81 0.47 F:CHIP
Q80 2SC2412K AMP
R86 15k :CHIP C80 100p SL:CHIP R87 22k :CHIP

CVBS AV-3 → AUDIO L → V3
Y AV-3 → Y3
C AV-3 → AUDIO R → C3
AUDIO L AV-3 → L3
AUDIO R AV-3 → R3
HP L ← AUDIO L ← HP L
HP R ← AUDIO R ← HP R
SP L → SP L → AUDIO L
SP R → SP R → AUDIO R

IC1 ST24E32M6TR NVM
IC4 PST593C-MMP-T RESET
C8 0.1 F:CHIP
IC3 TMS27PC010A-15 ROM
A16 A15 A12 A7 A6 A5 A4 A3 A2 A1 A0 A13 A8 A9 A11 OE
NC P STBY 5V STBY 5V
OUT RST GND
STBY 5V TEST SCL SDA

CN1 50P
GND GND GND GND ROTATION COIL V+ DRIVE 16:9 VERTICAL GND EAST/WEST DRIVE V- DRIVE H DRIVE V SYNC H FLYBACK VERTICAL GND EHT ABL PROTECTION DGC RELAY GND 9V 33V STANDBY 5V AFC SIRCS AUDIO L OUT SPEAKER CHASSIS STANDBY GND 5V AUDIO R OUT SPEAKER GND LUMISPONDER STANDBY LED GND GND GND GND FRONT KEY 1
TO B BOARD CN902


IC3
TMS27PC010A-15FML
ROM
IC1
SBA5250M-GEG
MICRO-CONTROLLER
IC2
ST24E32M6TR
NVM
IC4
PST593C-MMP-4P
RESET
IC301
CXA2000Q-TL
Y CHROMA
JUNGLE
STBY +5V
+9V
+5V
VIDEO
TO B BOARD
CN902



A (1/2) BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC201	13	4.4
	15	4.4
	20	3.5
	21	2.7
	22	4.9
	23	4.4
	24	0
	25	4.4
	26	8.8
	32	4.4
IC202	4	2.8
	6-7	0.1
	8	3.0
	9	3.6
	11	4.7
	13	4.7
	20-21	2.4
	23	0.2
	25	1.5
	26	4.8
	28	3.8
	29	2.6
	39-42	3.8
	44	7.1
	45	8.0
	46	7.1
	47-48	3.8
	53-54	3.8

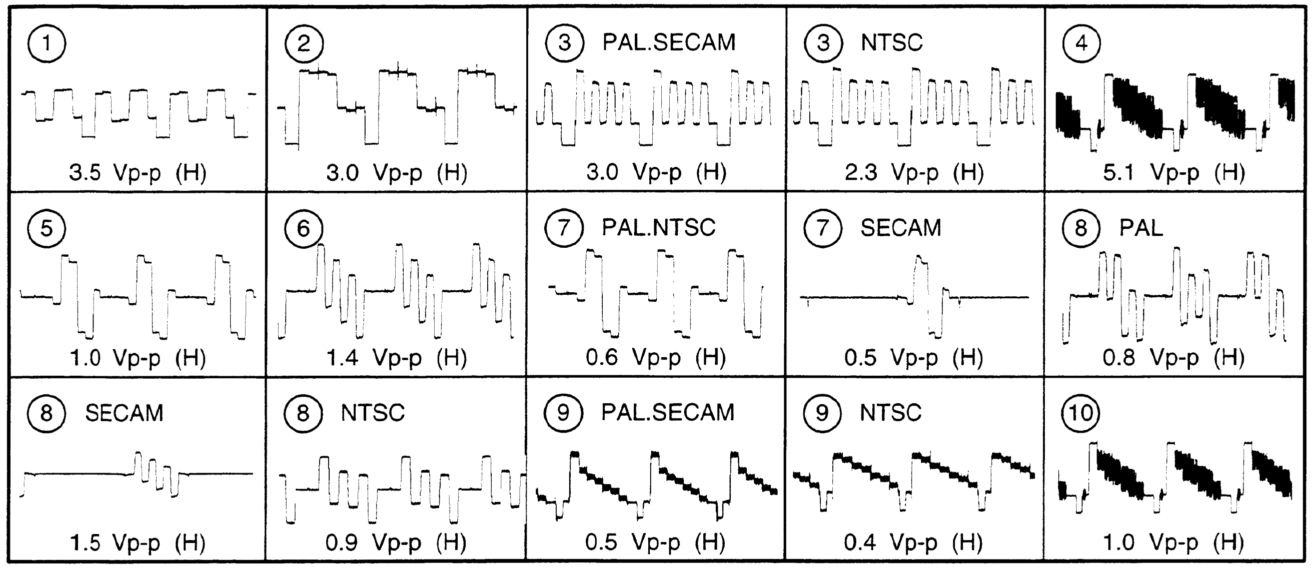
A (2/2) BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q1	3.7	4.8	3.1
Q4	0.1	4.8	-
Q5	0.7	4.8	4.0
Q15	-	4.3	-
Q16	4.3	0.2	-
Q17	0.4	3.5	-
Q18	3.5	0.7	-
Q80	2.6	2.2	-
Q81	2.4	-	3.0
Q304	-	4.8	-
Q305	-	4.8	-
Q330	4.5	-	5.1
Q331	6.3	8.8	5.7
Q332	3.1	8.8	2.5
Q1001	4.4	-	-

A (1/2) BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q110	1.8	8.2	1.2
Q112	1.5	8.8	0.8
Q113	1.8	-	-
Q114	5.4	6.0	-
Q120	84.3	8.8	3.7
Q121	1.5	5.4	0.9
Q122	5.4	8.8	4.7
Q124	-	8.8	-
Q201	4.4	8.8	3.7
Q202	4.4	8.8	3.7

WAVEFORMS A BOARD



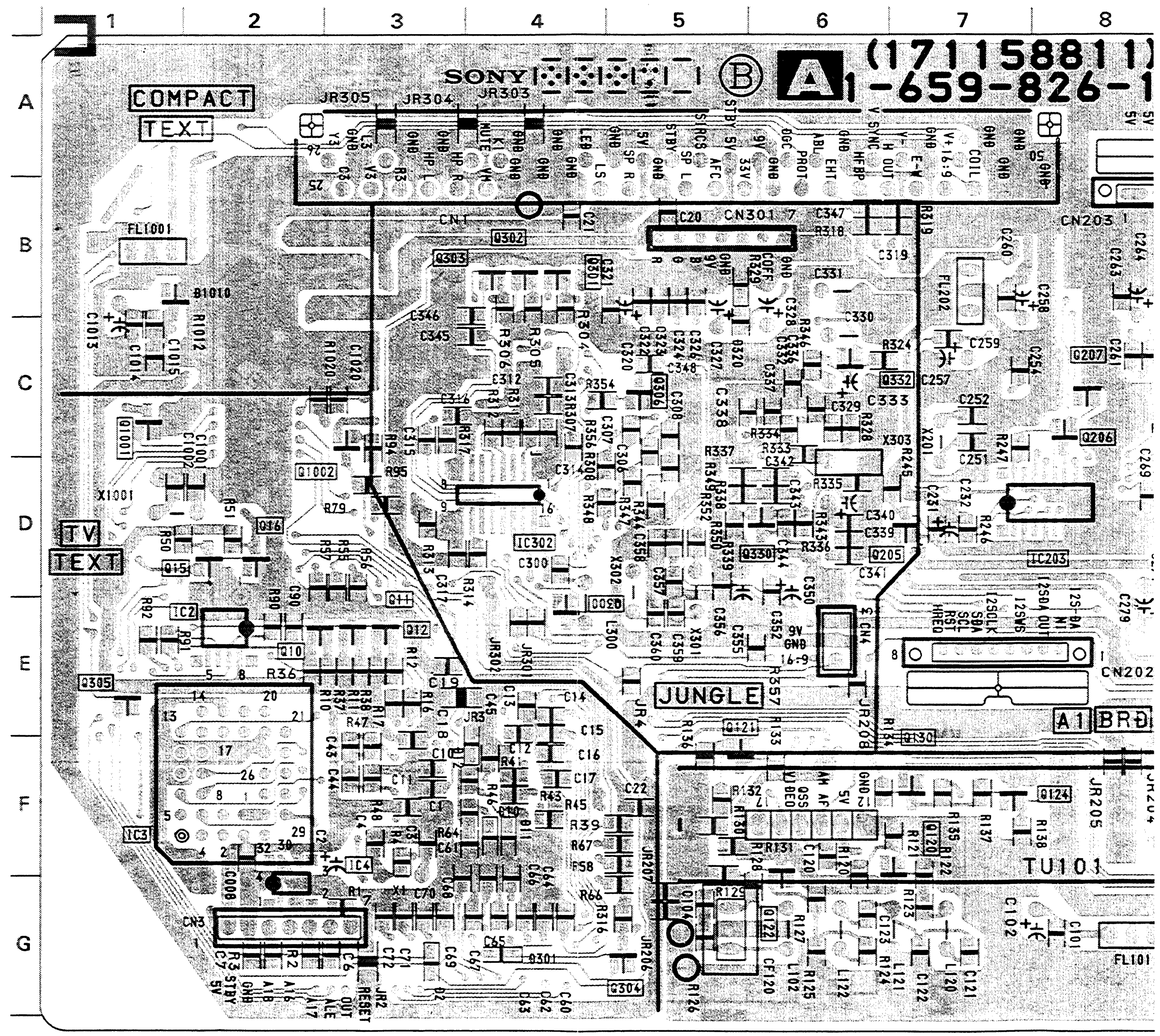
A (2/2) BOARD IC VOLTAGE TABLE

IC Voltage Table

Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC1	2	3.6	IC301	5	3.6	IC301	61	5.0
	3-4	4.8		6	5.0		62	7.6
	5	0.5		7-8	5.4	IC302	1	4.8
	7	4.8		10	0.6		5	0.7
	9	4.8		12-14	5.4		9	4.8
	11	2.4		16	4.0		11-12	3.0
	13	4.8		17-19	5.4		14	1.3
	14-15	2.3		20	8.8		16	1.3
	16-17	4.8		22-23	2.2	IC303	5	8.0
	48	4.0		24	2.0		3.2	10
	51	4.8		25	2.4		11	5.6
	52-53	2.4		26	2.0		0	19
	54	0.7		27	4.0		20	3.7
	55	0.2		28	6.6		4	0.2
	56-57	4.8		29	8.8		5	0.7
	58	2.8		31-33	3.0	IC1001	4	0.2
	59	3.5		34	4.0		5	0.7
	60	2.4		35	4.6		6	1.7
	62	0.7		36	8.8		7	1.8
	63	4.4		37	3.1		10	0.4
	65	4.8		38	3.4		11-12	4.8
	66	2.1		39	5.3		16	4.8
	67	2.0		40	4.2		17	0
	69-71	2.3		41	2.3		21	4.8
	72	4.8		43	1.7		23	3.0
	73	1.5		44	8.8		25	4.8
	74	1.2		45	2.5		56	0
	75-77	4.8		46	3.9		61	1.3
	79	0.2		47	3.0		62-63	1.4
	80	4.8		48	4.4		64	0
IC2	5-8	4.8		49	6.3		66	4.6
IC3	1	4.8		50-51	0.1		67	4.7
	31-32	4.8		53	3.9		68	4.0
IC4	1	4.8		54	5.0			
	3	4.8		55-56	4.2			
IC301	1	1.5		58-59	8.8			
	3-4	5.6		60	5.3			

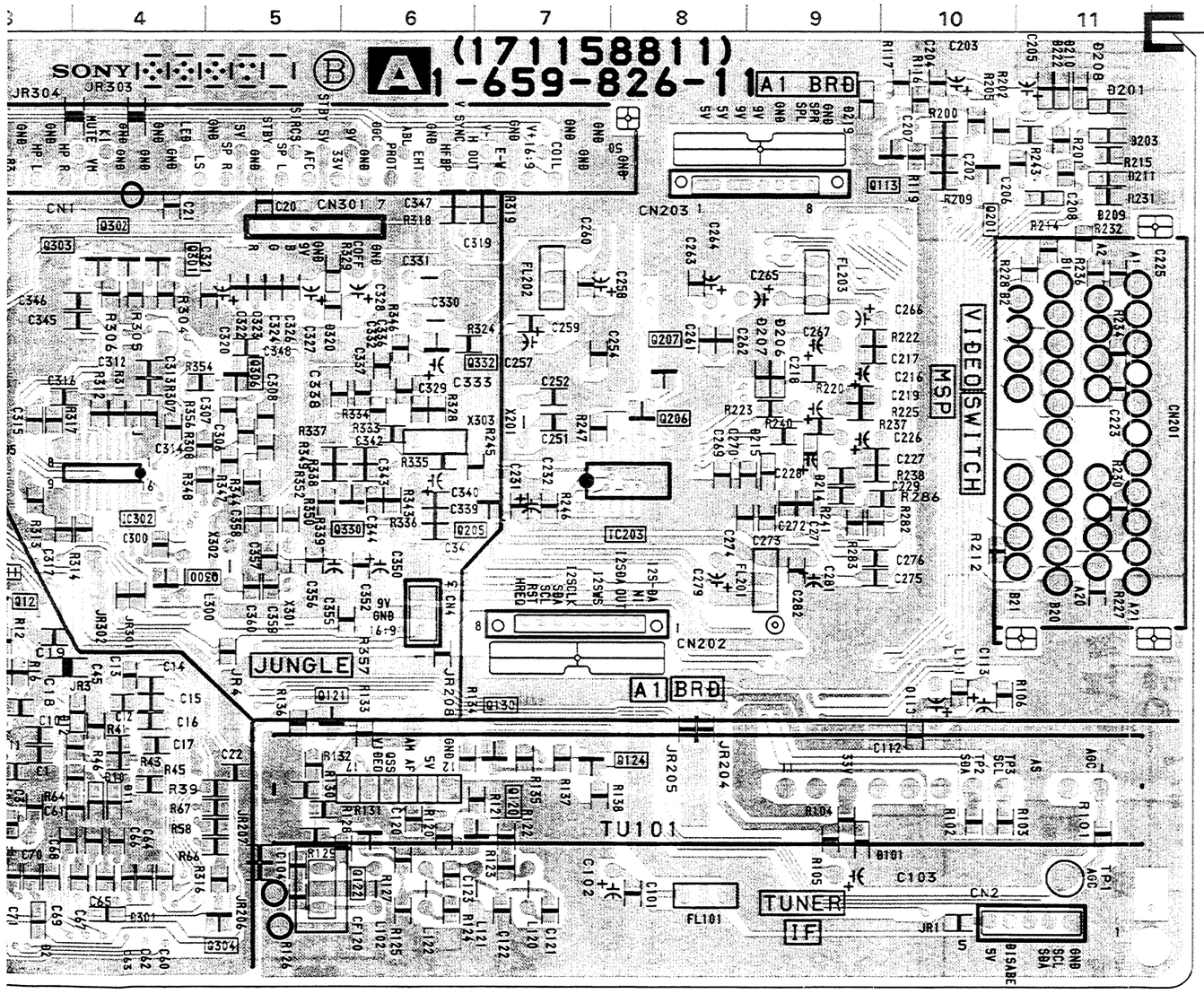
A [TUNER, AUDIO CONTROL VIDEO SW, DIGITAL SIGNAL PROCESSING Y/C JUNGLE MICRO CONTROLLER]

A Board <Conductor Side>

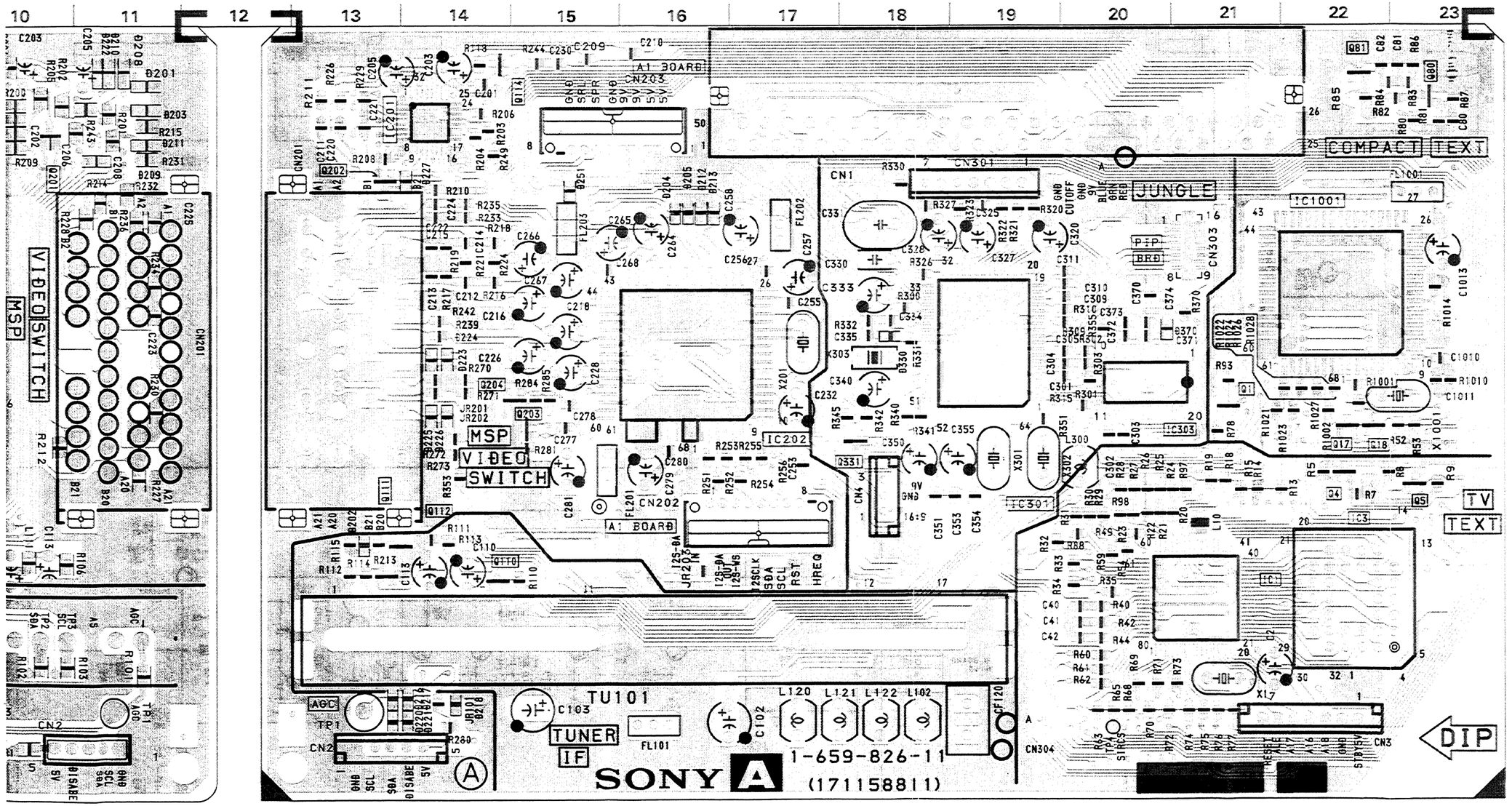


7

A Board <Component Side>

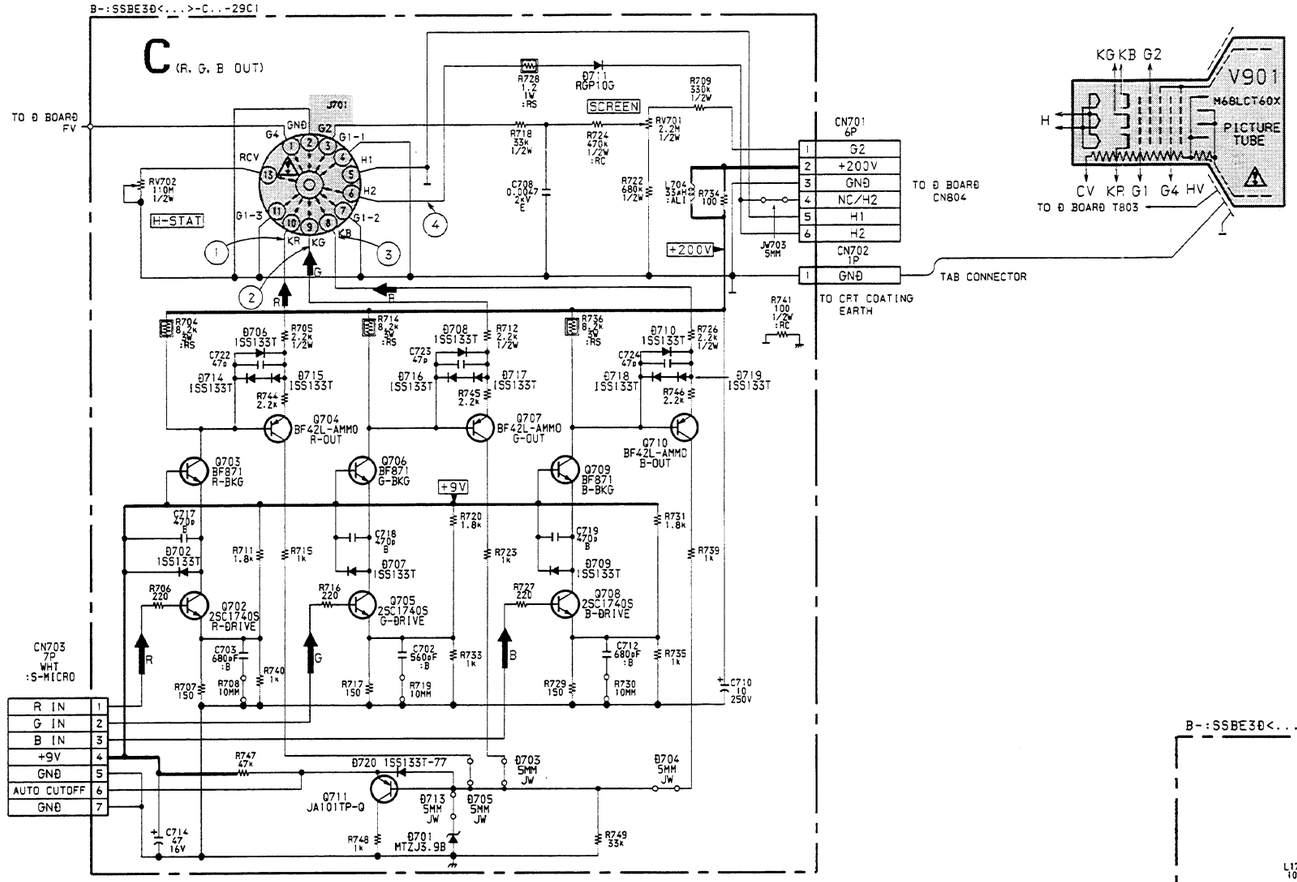


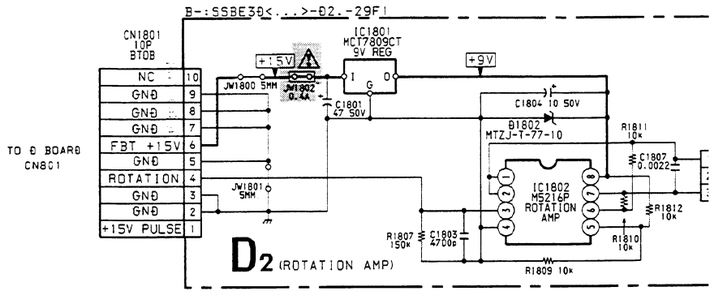
A Board <Component Side>



A BOARD

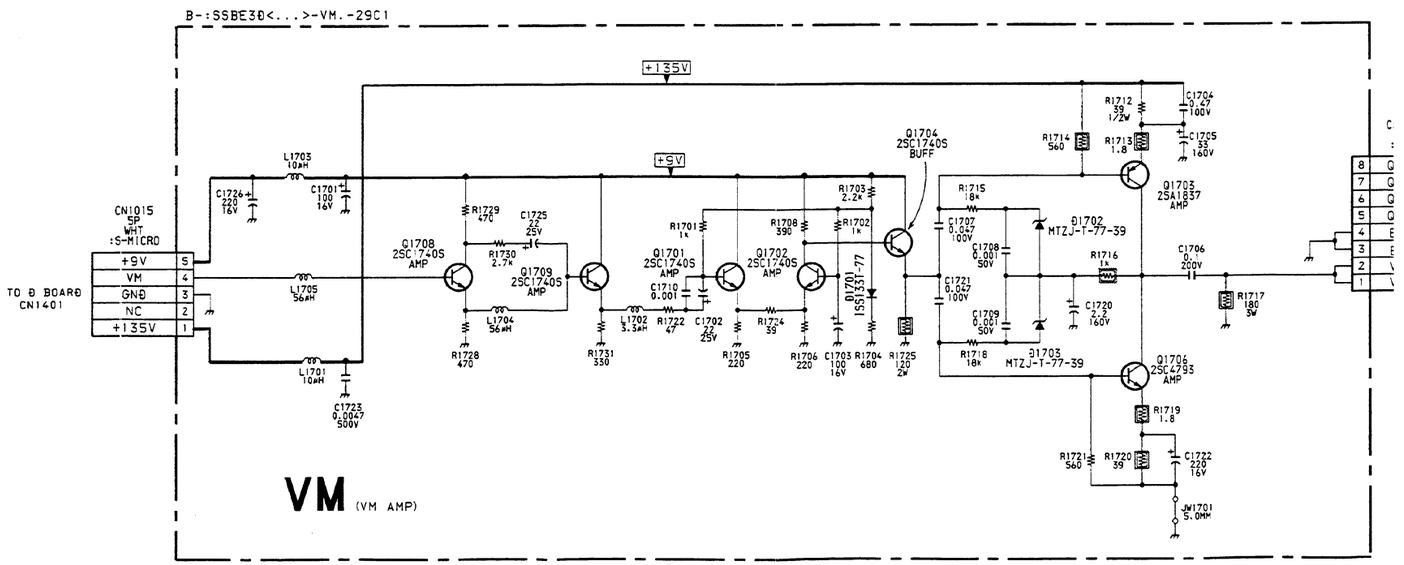
IC		Q305	E-1
IC1	F-21	Q306	C-5
IC2	E-2	Q330	D-6
IC3	F-2	Q331	D-18
IC4	G-2	Q332	C-6
IC201	A-14	Q1002	C-3
IC202	C-16	DIODE	
IC203	D-8	D2	G-3
IC301	C-19	D10	F-10
IC302	D-4	D11	F-10
IC303	D-21	D12	F-4
TRANSISTOR		D101	F-9
Q1	D-21	D201	A-11
Q4	E-22	D202	E-13
Q5	E-23	D203	A-11
Q10	E-2	D204	B-16
Q11	E-3	D205	B-16
Q15	D-2	D206	C-9
Q16	D-2	D207	C-9
Q17	D-22	D208	A-11
Q18	D-23	D209	B-11
Q80	A-23	D210	A-11
Q81	A-22	D211	B-11
Q110	F-14	D212	B-16
Q111	E-14	D213	B-16
Q112	E-14	D214	D-9
Q113	A-10	D215	D-9
Q114	A-14	D216	G-14
Q120	F-7	D217	G-14
Q121	F-5	D218	G-14
Q122	F-6	D220	G-14
Q124	F-7	D221	D-14
Q130	F-7	D222	D-14
Q201	B-10	D223	D-14
Q202	B-13	D224	D-14
Q203	D-15	D225	D-14
Q204	D-15	D226	D-14
Q205	D-7	D227	B14
Q206	C-8	D251	B-15
Q207	C-8	D320	C-5
Q304	G-5	D370	C-21

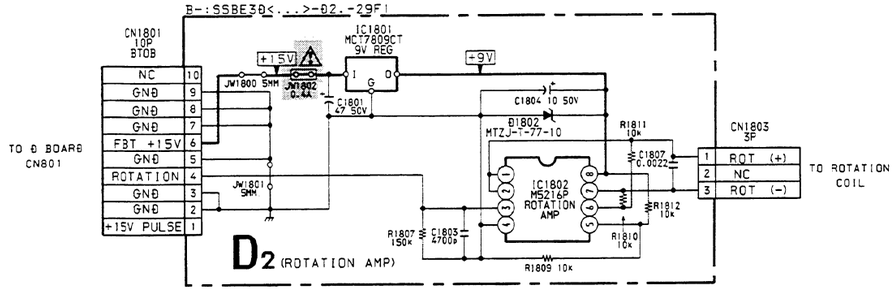


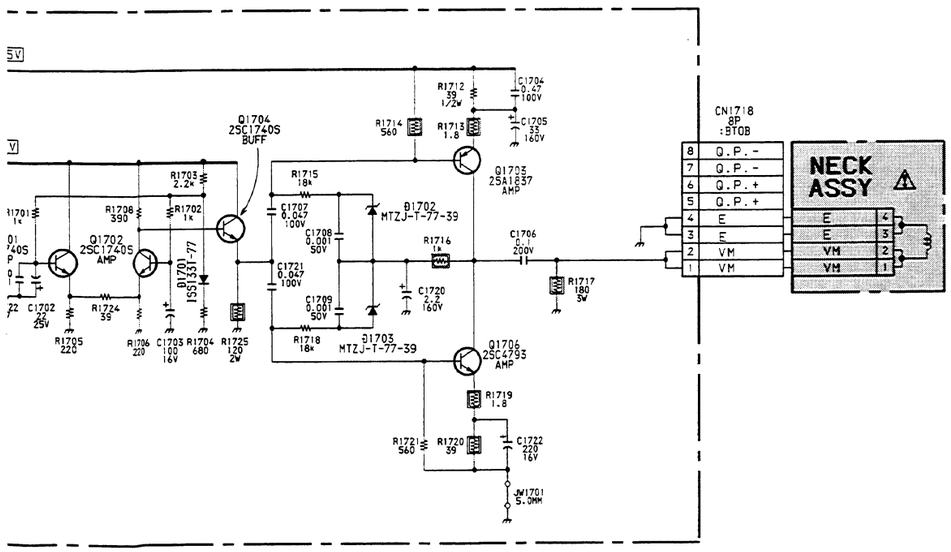


WAVEFORMS C BOARD

①	②	③	④
110 Vp-p (H)	108 Vp-p (H)	90 Vp-p (2H)	21 Vp-p (2H)



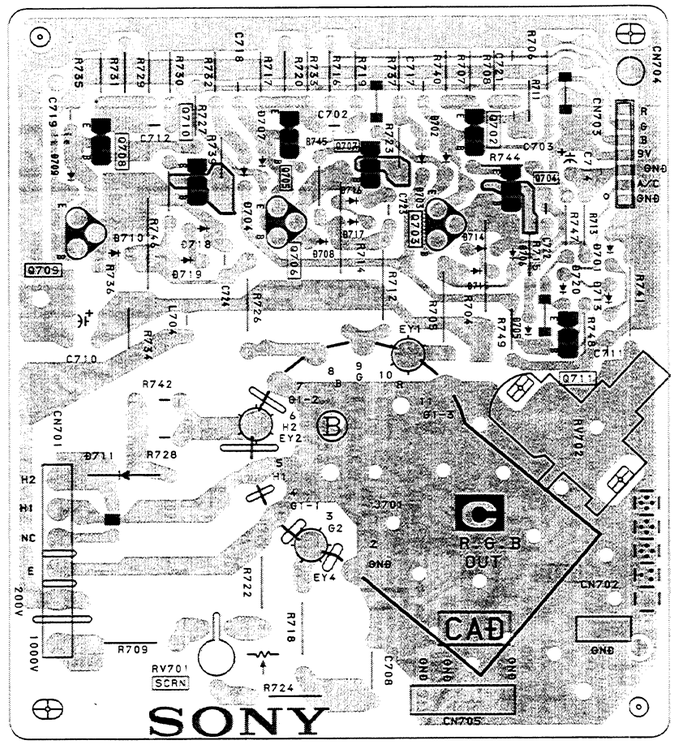




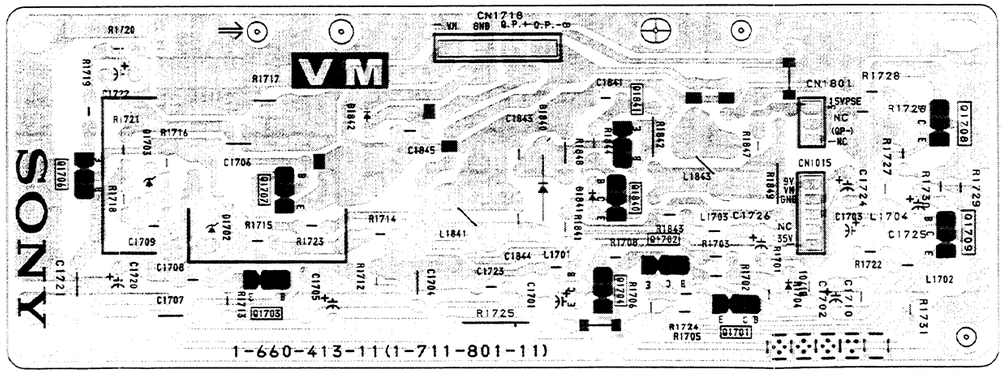
— 60 —

C [R, G, B OUT] **VM** [VM AMP]

C Board



VM Board



C BOARD TRANSISTOR VOLTAGE T.

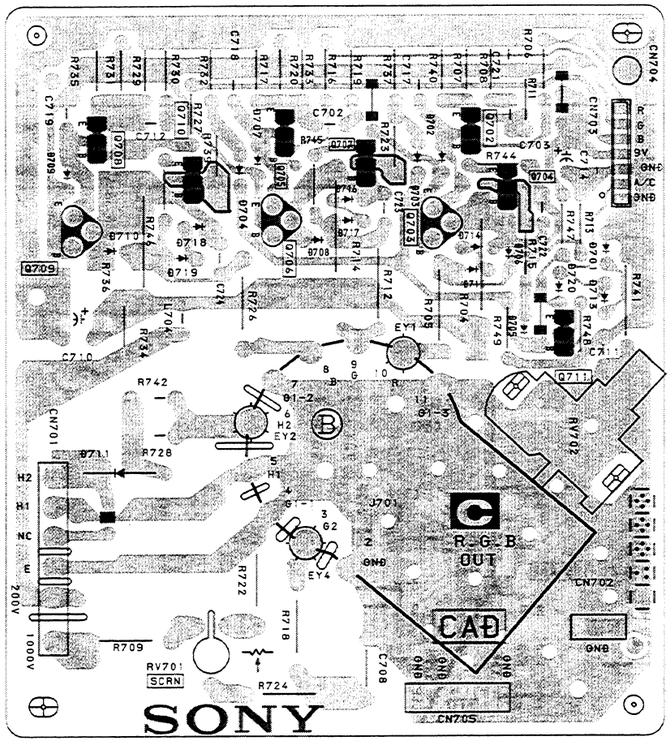
Transistor Voltage Table

Ref No	B Base	C Collector	E Em
Q702	2.0	11.4	1
Q703	12.0	168.3	11
Q704	168.3	6.0	16
Q705	1.7	11.4	1
Q706	12.0	178.8	11
Q707	178.2	6.2	17
Q708	2.0	11.4	1
Q709	12.0	168.3	11
Q710	168.0	6.4	16

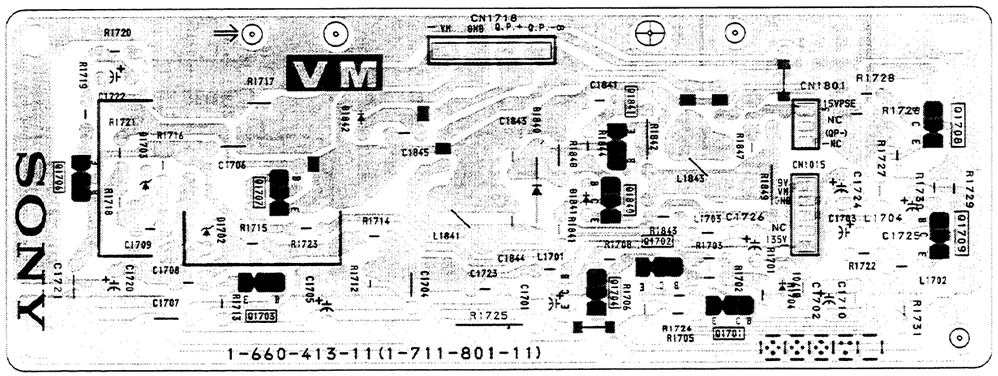
— 61 —

C [R, G, B OUT] VM [VM AMP]

C Board

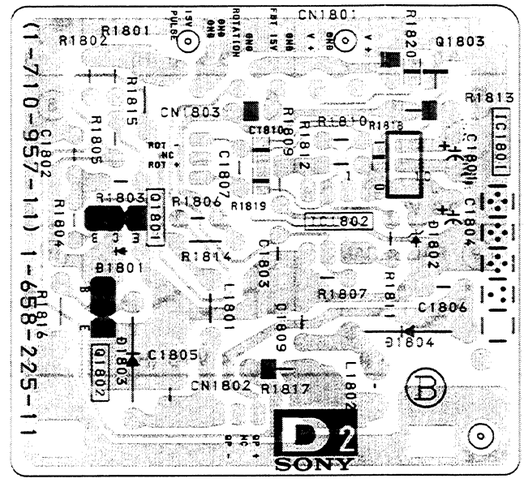


VM Board



D2 [ROTATION AMP]

D2 Board



C BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q702	2.0	11.4	1.4
Q703	12.0	168.3	11.4
Q704	168.3	6.0	163.5
Q705	1.7	11.4	1.2
Q706	12.0	178.8	11.4
Q707	178.2	6.2	173.8
Q708	2.0	11.4	1.4
Q709	12.0	168.3	11.4
Q710	168.0	6.4	160.0

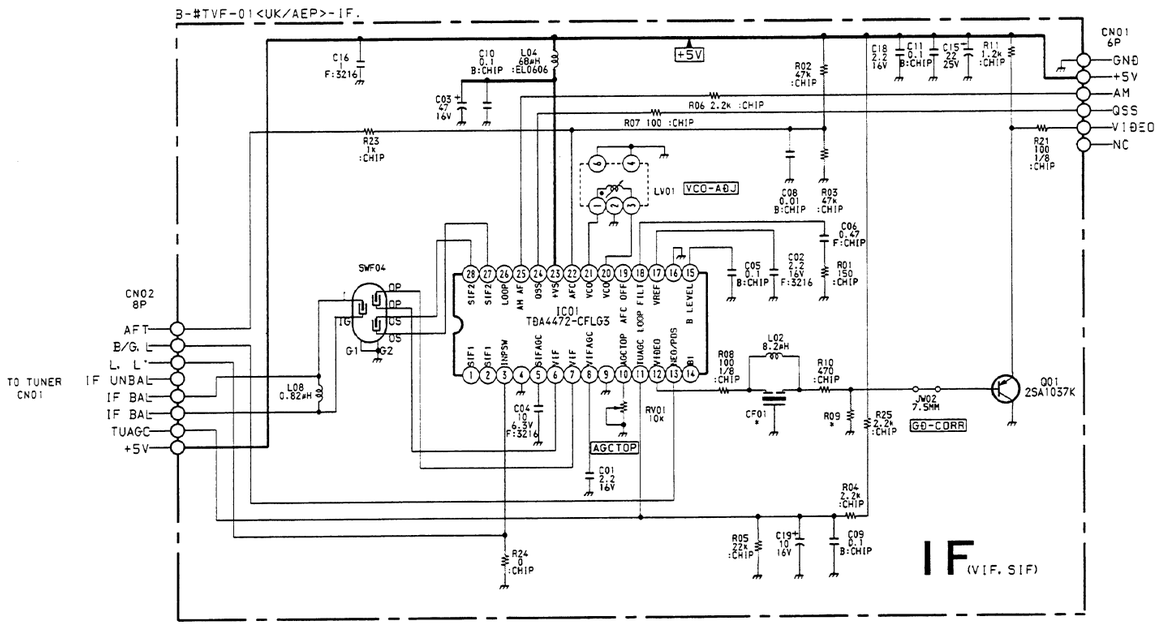
VM BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q1701	2.5	8.8	1.8
Q1702	2.5	5.5	1.8
Q1703	134.3	71.8	134.8
Q1704	5.5	8.8	4.8
Q1706	1.0	71.8	0.4
Q1707	0.7	-	-
Q1708	2.9	6.6	2.2
Q1709	2.2	8.8	1.5
Q1840	0.6	-	-

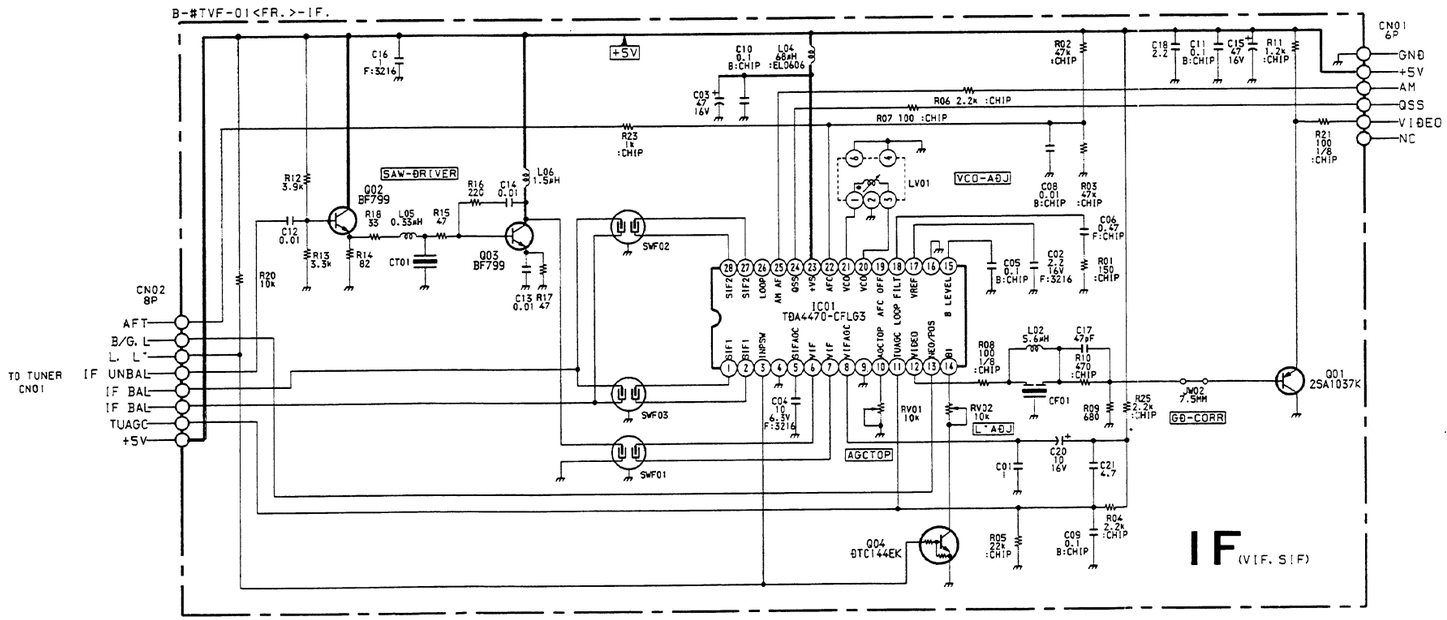
D2 BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC1802	1-2	2.8
	3	3.0
	5-6	4.4
	7	6.2
	8	9.0

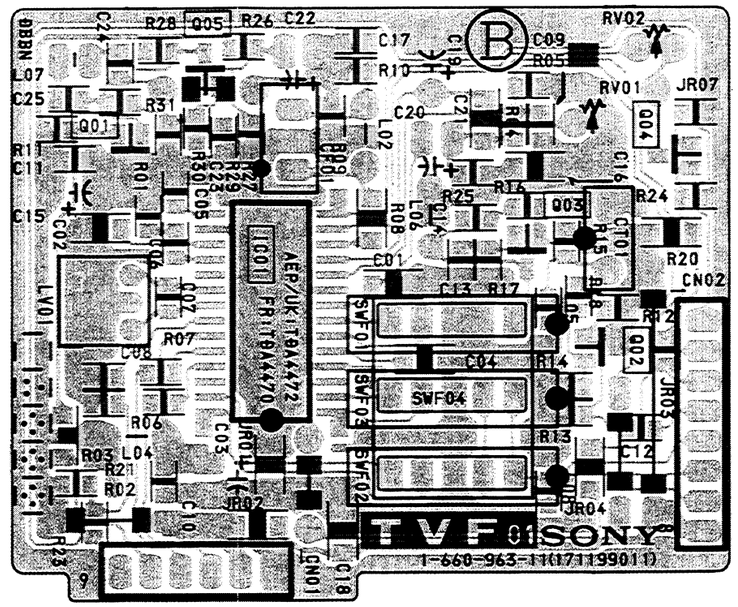
VIF (AEP) (KV-29C1A, 29C1D, 29C1D 1, 29C1E, 29C1K ONLY)



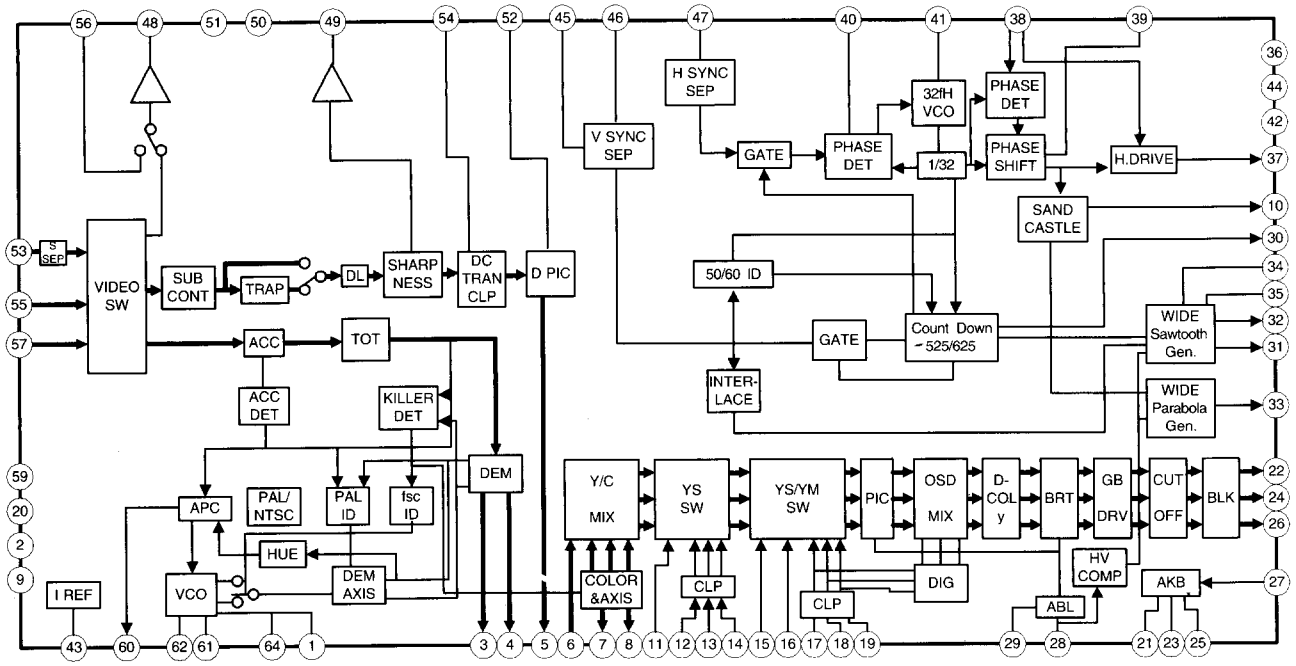
VIF (FR) (KV-29C1B ONLY)



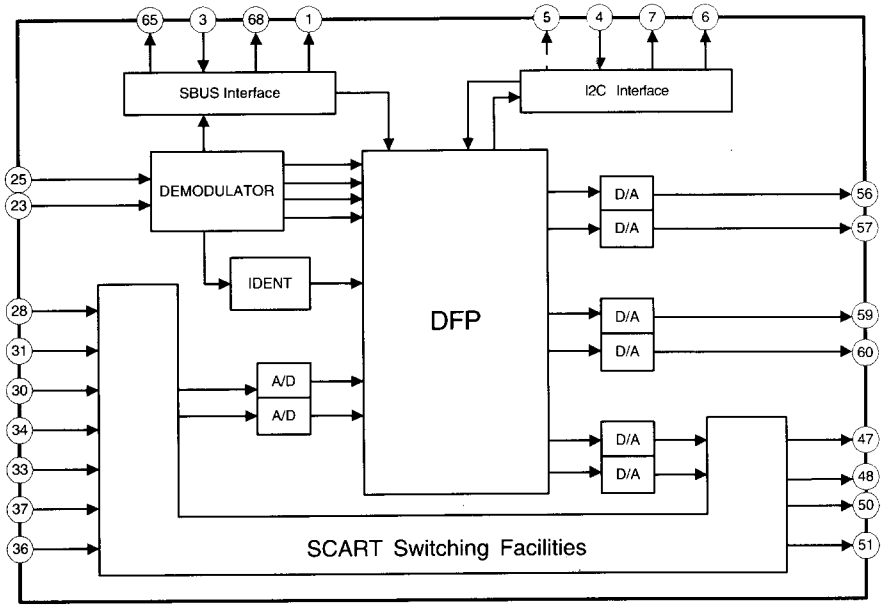
IF Board



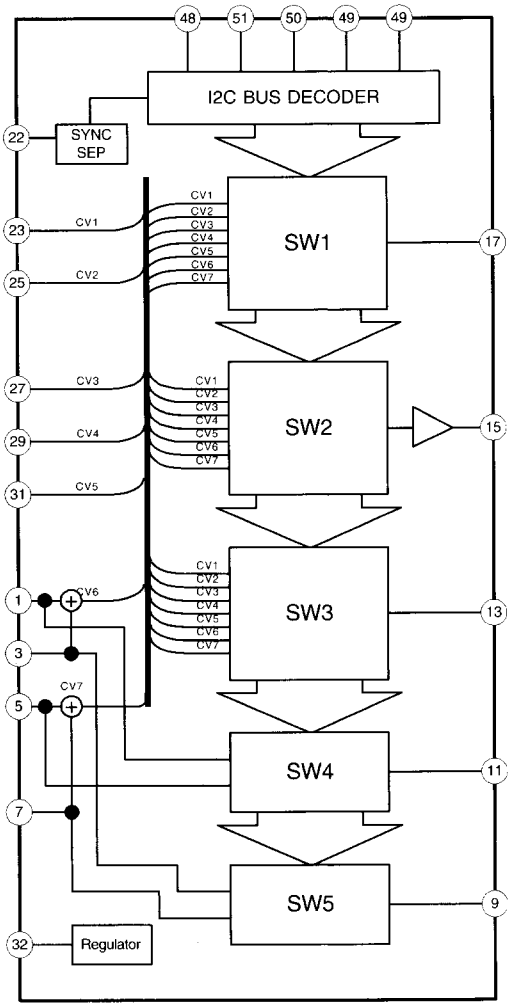
A BOARD IC301 CXA2000Q-TL



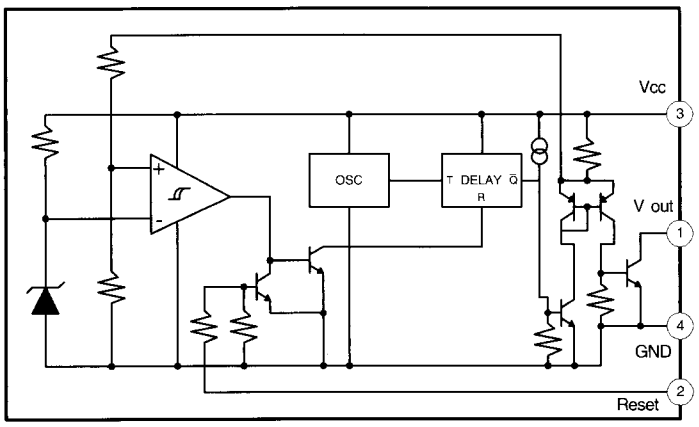
A BOARD IC202 MSP3410B-PS/MSP3400C-P5



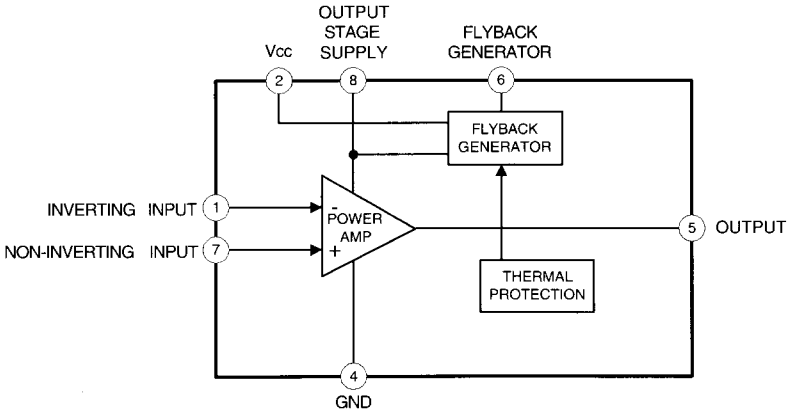
A BOARD IC201 CXA2040Q



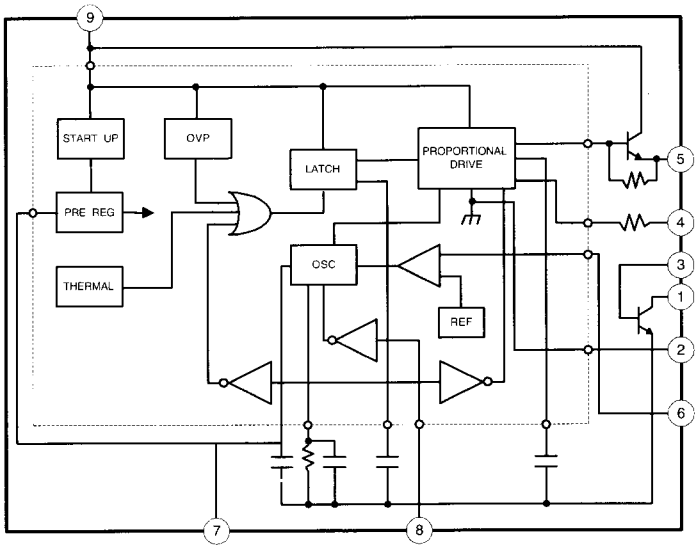
A BOARD IC4 PST593C-MMP-4P



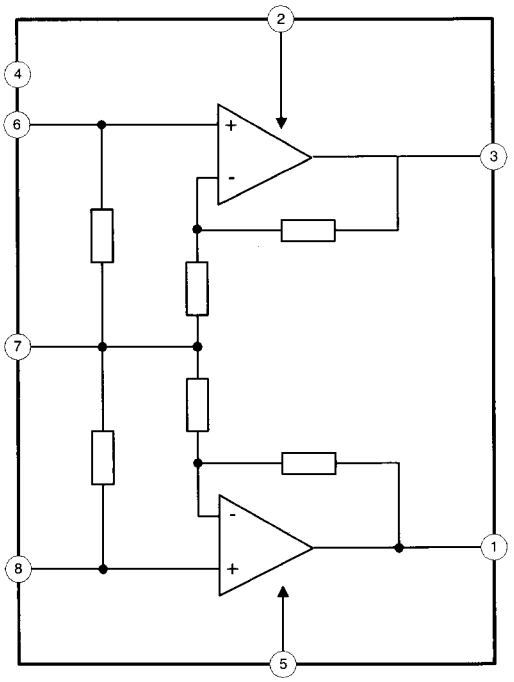
D BOARD IC500 STV9379



D BOARD IC600 STR-S6708

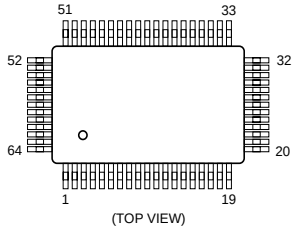


D BOARD IC1200 TDA7264

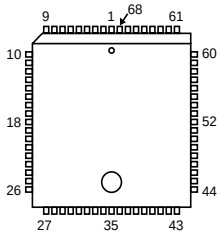


5-4. SEMICONDUCTORS

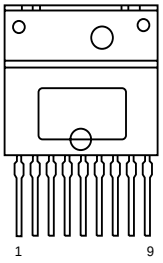
CXA2000Q-TL



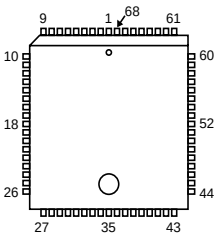
MSP3400C-PS
MSP3410B-PS-F7-T
SDA5273CP-GEG



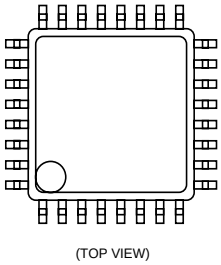
STR-S6709



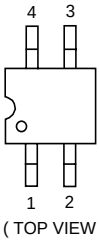
TMS27PC020A-15FML



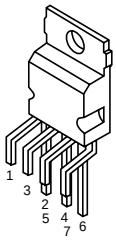
CXA2040Q-T4



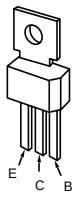
PST593C-MMP-4P



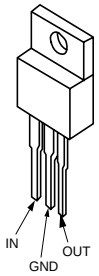
STV9379



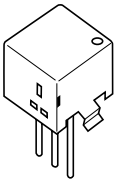
BF871-127



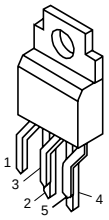
L4941BV
LM2940CT-5.0
LM2940T-9.0
MCT7809CT
NJM78M09FA
TEA7605
µPC2405HF



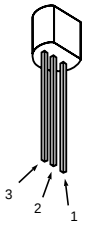
SBX1790-51



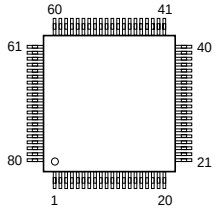
TDA2050



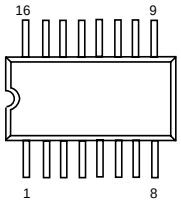
BF421L-AMMO
JC501-Q-AMMO
2SA933AS
2SA933S
2SA1091-O
2SC3502-F
2SC2808STP-R
2SC3601-E



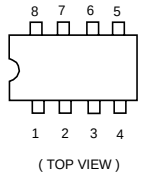
SDA5250M-C5-GEG



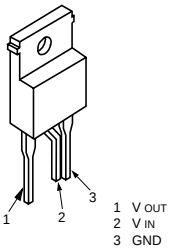
TDA4665T-T



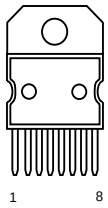
LM393P
M5216P
TDA2822M
µPC393C



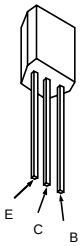
SE-135N



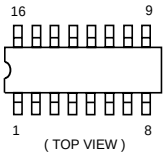
TDA7264



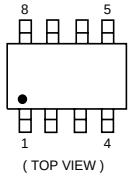
DTA144ES
DTC114ES
DTC143TS
DTC144ES
2SC1740S-RT



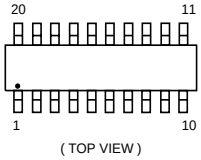
MC14052BDR2



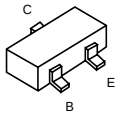
ST24E32M6TR



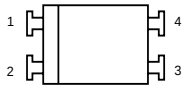
TDA8395T



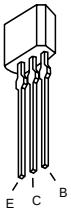
DTC144EK
2SA1037K
2SA1162-G
2SC2412K



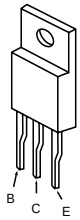
TLP721(D4-)



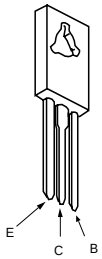
2SA1175-HFE
2SC2785-HFE



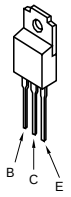
2SA1667
2SA1837
2SC3852A



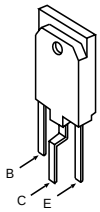
2SC2688-LK



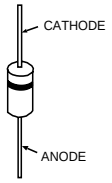
2SC4793



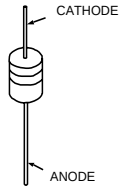
2SC4927-01



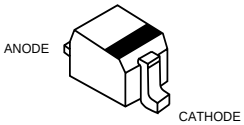
AU-01Z-V1
EG-1Z-V1
EGP20G
EL1Z
EM1-V1
EU-1-V1
EU2A
EU2-V1
FML-G12S
GP08D
RGP02
RGP10GPKG23
RGP15GPKG23
RU3YX-LF-C4
RU3YX-V1
RU4AM-T3
RU4DS



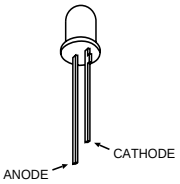
MTZJ-T-77-9.1A
MTZJ-3.6A
MTZJ-3.9B
MTZJ-5.1B
MTZJ-5.6B
MTZJ-6.2B
MTZJ-6.8B
MTZJ-7.5C
MTZJ-10
MTZJ-39C
RD3.9ESB2
RD5.1ESB2
RD5.6ESB2
RD6.2ESB2
RD6.8ESB2
RD7.5ESB2
RD10ESB2
RD39ES-B2
1SS133T-77



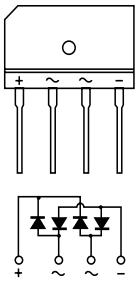
BAS216
DTZ6.8C
DTZ9.1
DTZ33B
MA8330
1SS355
UDZ-TE-17-5.6B
UDZ-TE-17-9.1B



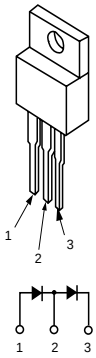
SLA-570KT3F



D4SB60L



FMS-3FU



SECTION 6

EXPLODED VIEWS

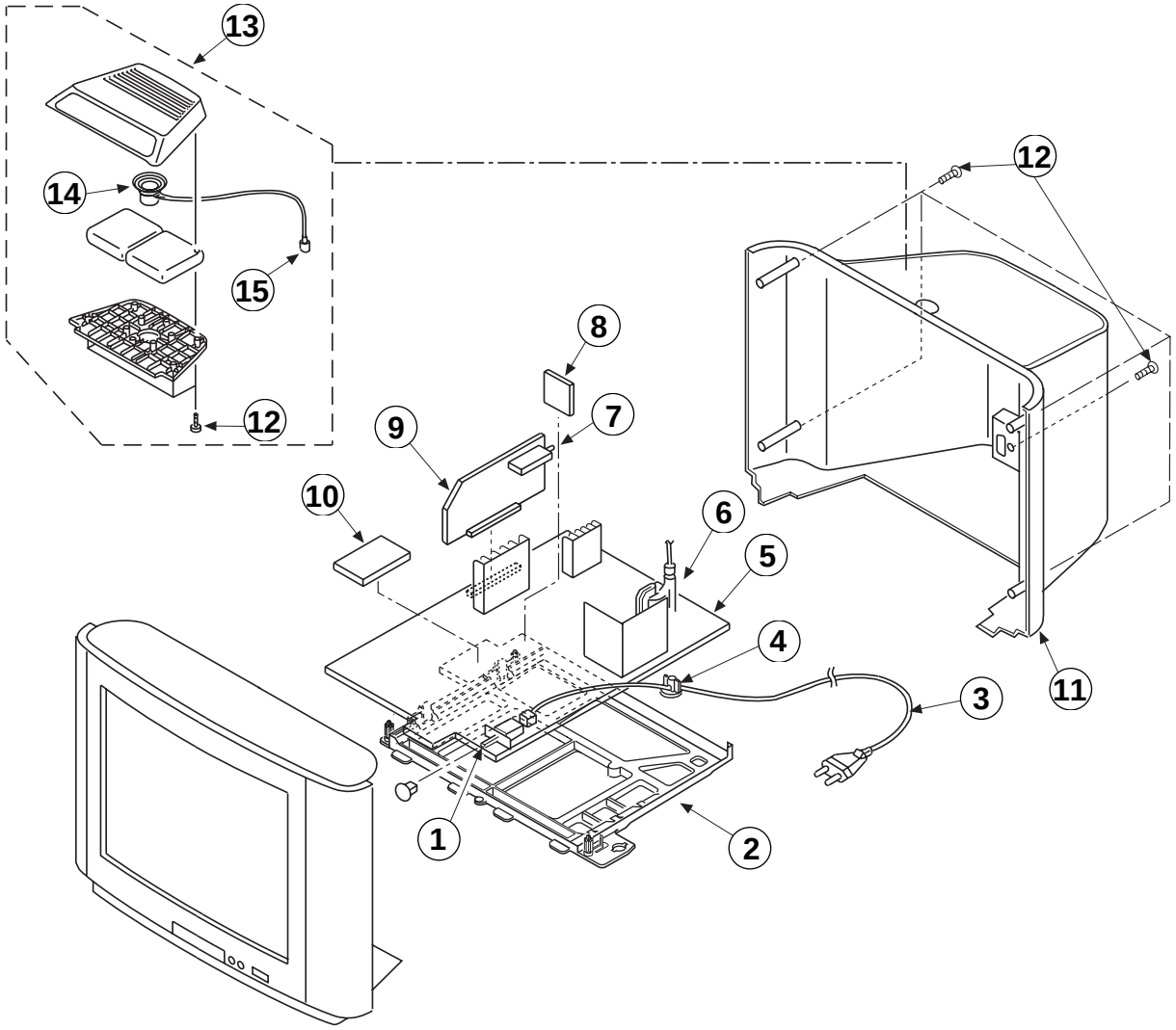
NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

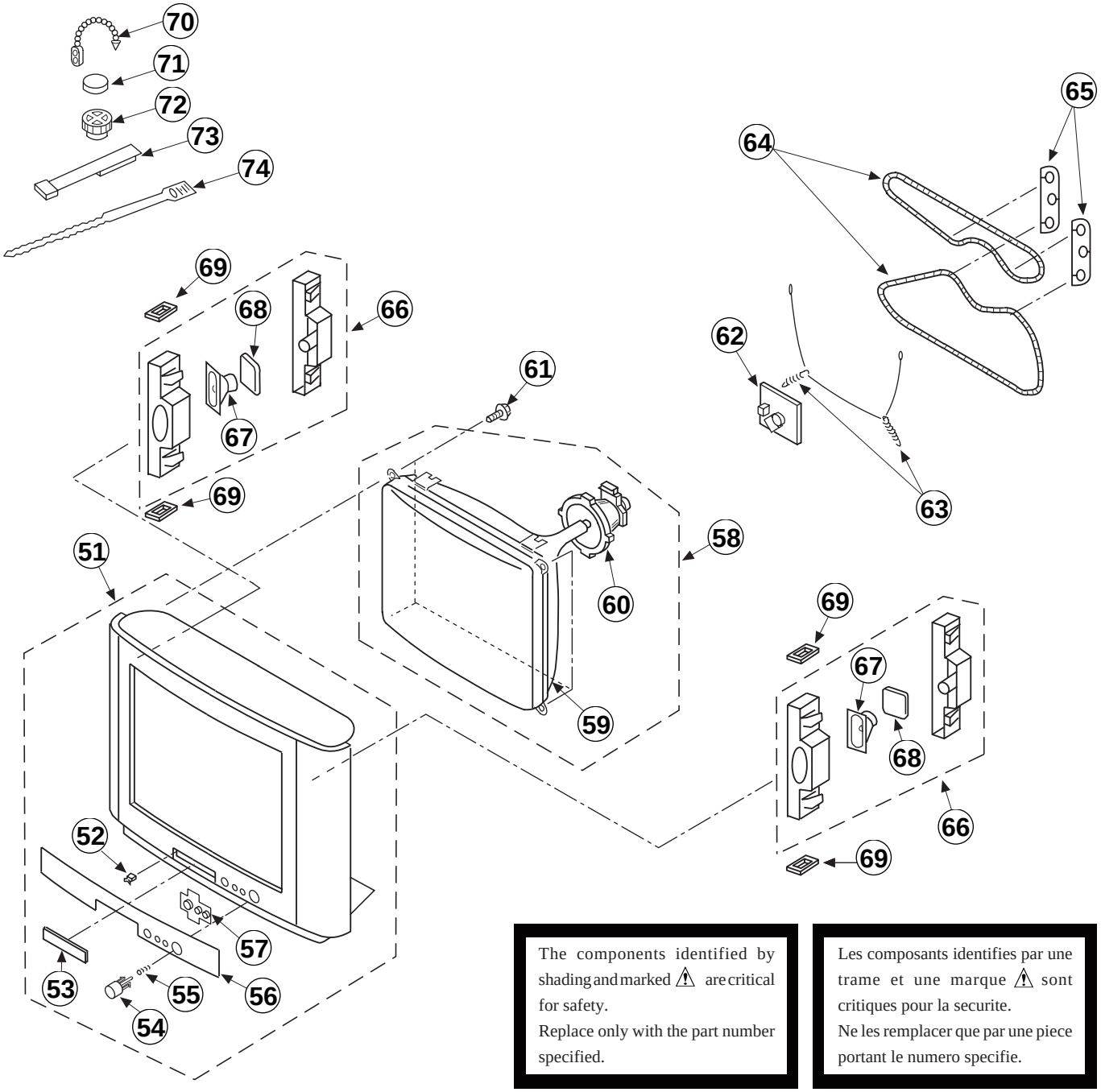
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

6-1. CHASSIS



REF NO		PART NO	DESCRIPTION	REMARK
1	⚠	1-571-433-21	SWITCH, PUSH (AC POWER)	
2		*4-203-526-01	BRACKET, MAIN	
3	⚠	1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V	
4	⚠	*4-202-531-01	AC CORD LOCK (SC)	
5		*A-1642-173-A	D BOARD, COMPLETE	
6	⚠	1-453-169-11	TRANSFORMER ASSY, FLYBACK (UX-1604A2)	
7		1-693-338-11	TUNER/VIF (AEP)(KV-25C2A/25C2D/25C2E)	
		1-693-340-11	TUNER/VIF (FR) (KV-25C2B)	
8		*A-1651-070-A	J3 BOARD, COMPLETE	
9		*A-1632-508-A	A BOARD, COMPLETE (KV-25C2A)	
		*A-1632-510-A	A BOARD, COMPLETE (KV-25C2B)	
		*A-1632-446-A	A BOARD, COMPLETE (KV-25C2D)	
		*A-1632-509-A	A BOARD, COMPLETE (KV-25C2E)	
10		*A-1649-011-A	K BOARD, COMPLETE	
11		4-202-986-11	COVER, REAR	
12		4-039-358-01	SCREW (4x16), (+) BV TAPPING	
13		A-1678-053-A	BOX ASSY, WOOFER	12,14,15
14		1-544-767-11	SPEAKER (13CM)	
15		1-696-554-11	CABLE SPEAKER (WITH PLUG)	

6-2. PICTURE TUBE



The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF NO		PART NO	DESCRIPTION	REMARK
51		X-4200-276-1	BEZNET ASSY(S)(KV-25C2A/25C2D)	52-60
		X-4200-277-1	BEZNET ASSY(S-N)(KV-25C2B/25C2E)	52-60
52		4-392-036-01	CATCHER, PUSH	
53		4-203-013-01	DOOR (PAINTED) (S)	
54		4-202-983-01	BUTTON, POWER	
55		4-202-964-01	SPRING	
56		X-4200-274-1	PANEL ASSY(S) (KV-25C2A/25C2D)	
		X-4200-275-1	PANEL ASSY(S-N) (KV-25C2B/25C2E)	
57		4-203-524-01	WINDOW, ORNAMENTAL	
58	⚠	8-733-254-61	ITC	
59	⚠	8-733-254-05	PICTURE TUBE (SD-257) (M60LCS60X)	
60	⚠	8-451-404-51	DEFLECTION YOKE (Y25GXA-B2)	
61		4-203-043-01	SCREW (M), PT	
62		*A-1638-087-A	C BOARD, COMPLETE	
63		4-369-318-51	SPRING, TENSION	
64	⚠	1-406-806-21	COIL, DEGAUSSING	
65		4-202-745-01	HOLDER, D.G.C. (25")	
66		*A-1678-087-A	BOX ASSY	67-68
67		1-504-146-11	SPEAKER (5X11CM)	
68		4-200-999-01	STOPPER	
69		*4-202-988-01	CUSHION, BOX	
70		4-308-870-00	CLIP, LEAD WIRE	
71		1-452-032-00	MAGNET, DISK; 10MM Ø	
72		1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
73		X-4387-214-1	PERMALLOY ASSY, CORRECTION	
74		3-701-007-00	BAND, BINDING	

SECTION 7

ELECTRICAL PARTS LIST

The components identified by shading and marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

When indicating parts by reference number, please include the bnard name.

CAPACITORS COILS

MF : mF, PF : mmF MMH : mH, µH : mH

A

REF.NO.	PART NO.	DESCRIPTION		REMARK
	*A-1632-508-A	A BOARD, COMPLETE (KV-25C2A) **********		
	*A-1632-510-A	A BOARD, COMPLETE (KV-25C2B) **********		
	*A-1632-446-A	A BOARD, COMPLETE (KV-25C2D) **********		
	*A-1632-509-A	A BOARD, COMPLETE (KV-25C2E) **********		
	1-750-797-11	SOCKET, PLCC		
		< CAPACITOR >		
C1	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C2	1-126-965-11	ELECT 22MF	20%	50V
C3	1-163-104-00	CERAMIC CHIP 30PF	5%	50V
C4	1-163-104-00	CERAMIC CHIP 30PF	5%	50V
C8	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C10	1-163-243-11	CERAMIC CHIP 47PF	5%	50V
C11	1-163-243-11	CERAMIC CHIP 47PF	5%	50V
C14	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C15	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C18	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C19	1-163-989-11	CERAMIC CHIP 0.033MF	10%	25V
C20	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C21	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C22	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C43	1-163-121-00	CERAMIC CHIP 150PF	5%	50V
C45	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C80	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C81	1-164-005-11	CERAMIC CHIP 0.47MF		25V
C82	1-163-037-11	CERAMIC CHIP 0.022MF	10%	50V
C90	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C101	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C102	1-126-934-11	ELECT 220MF	20%	16V
C103	1-126-965-11	ELECT 22MF	20%	50V
C104	1-163-117-00	CERAMIC CHIP 100PF	5%	50V (KV-25C2B)
C110	1-126-967-11	ELECT 47MF	20%	16V
C112	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C113	1-126-967-11	ELECT 47MF	20%	16V
C115	1-102-112-00	CERAMIC 330PF	10%	50V (KV-25C2B)
C120	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C121	1-163-247-11	CERAMIC CHIP 68PF	5%	50V
C122	1-163-137-00	CERAMIC CHIP 680PF	5%	50V
C123	1-163-247-11	CERAMIC CHIP 68PF	5%	50V
C124	1-137-399-11	FILM 0.1MF	5%	50V
C201	1-163-139-00	CERAMIC CHIP 820PF	5%	50V
C202	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C203	1-126-933-11	ELECT 100MF	20%	16V
C204	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C205	1-126-965-11	ELECT 22MF	20%	50V
C206	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C207	1-164-505-11	CERAMIC CHIP 2.2MF		16V
C208	1-164-505-11	CERAMIC CHIP 2.2MF		16V
C209	1-164-505-11	CERAMIC CHIP 2.2MF		16V
C210	1-216-295-00	METAL GLAZE 0	5%	1/10W
C211	1-164-505-11	CERAMIC CHIP 2.2MF		16V
C212	1-164-346-11	CERAMIC CHIP 1MF		16V
C213	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C214	1-164-346-11	CERAMIC CHIP 1MF		16V
C215	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C216	1-126-967-11	ELECT 47MF	20%	16V
C217	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C218	1-126-967-11	ELECT 47MF	20%	16V
C219	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C220	1-164-505-11	CERAMIC CHIP 2.2MF		16V
C221	1-164-505-11	CERAMIC CHIP 2.2MF		16V
C222	1-164-346-11	CERAMIC CHIP 1MF		16V
C223	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C224	1-164-346-11	CERAMIC CHIP 1MF		16V
C225	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C226	1-126-967-11	ELECT 47MF	20%	16V
C227	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C228	1-126-967-11	ELECT 47MF	20%	16V
C229	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C230	1-216-295-00	METAL GLAZE 0	5%	1/10W
C231	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C232	1-126-967-11	ELECT 47MF	20%	16V
C251	1-163-087-00	CERAMIC CHIP 4PF	0.25PF	50V
C252	1-163-087-00	CERAMIC CHIP 4PF	0.25PF	50V
C253	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C254	1-163-109-00	CERAMIC CHIP 47PF	5%	50V
C255	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C256	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C257	1-126-965-11	ELECT 22MF	20%	50V
C258	1-126-964-11	ELECT 10MF	20%	50V
C259	1-164-336-11	CERAMIC CHIP 0.33MF		25V
C260	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C261	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C262	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C263	1-163-038-00	CERAMIC CHIP 0.1MF		25V

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
C264	1-126-962-11	ELECT 3.3MF 20% 50V	
C265	1-126-964-11	ELECT 10MF 20% 50V	
C266	1-126-964-11	ELECT 10MF 20% 50V	
C267	1-126-965-11	ELECT 22MF 20% 50V	
C268	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C269	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C270	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C271	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C272	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C273	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C274	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C275	1-164-346-11	CERAMIC CHIP 1MF 16V	
C276	1-164-346-11	CERAMIC CHIP 1MF 16V	
C277	1-164-346-11	CERAMIC CHIP 1MF 16V	
C278	1-164-346-11	CERAMIC CHIP 1MF 16V	
C279	1-126-965-11	ELECT 22MF 20% 50V	
C280	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C281	1-126-965-11	ELECT 22MF 20% 50V	
C282	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C300	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
C301	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C302	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C303	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C304	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C305	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C306	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C307	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C308	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C309	1-164-346-11	CERAMIC CHIP 1MF 16V	
C310	1-164-346-11	CERAMIC CHIP 1MF 16V	
C311	1-164-346-11	CERAMIC CHIP 1MF 16V	
C312	1-164-505-11	CERAMIC CHIP 2.2MF 16V	
C313	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C315	1-216-295-00	METAL GLAZE 0 5% 1.10W	
C317	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C319	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C320	1-126-965-11	ELECT 22MF 20% 50V	
C321	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C322	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	
C323	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	
C324	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	
C325	1-164-346-11	CERAMIC CHIP 1MF 16V	
C326	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C327	1-137-374-11	FILM 0.047MF 5% 50V	
C328	1-126-964-11	ELECT 10MF 20% 50V	
C329	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C330	1-130-777-00	FILM 0.1MF 5% 63V	
C331	1-137-581-11	FILM 0.1MF 5% 100V	
C332	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C333	1-126-933-11	ELECT 100MF 20% 16V	
C334	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C335	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C336	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C337	1-164-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C338	1-164-346-11	CERAMIC CHIP 1MF 16V	
C339	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C340	1-126-933-11	ELECT 100MF 20% 16V	
C341	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C342	1-164-346-11	CERAMIC CHIP 1MF 16V	
C343	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C344	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C347	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C348	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C350	1-126-964-11	ELECT 10MF 20% 50V	
C351	1-164-505-11	CERAMIC CHIP 2.2MF 16V	
C352	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C353	1-164-505-11	CERAMIC CHIP 2.2MF 16V	
C354	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C355	1-126-965-11	ELECT 22MF 20% 50V	
C356	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C357	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C358	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C359	1-163-231-11	CERAMIC CHIP 15PF 5% 50V	
C360	1-163-231-11	CERAMIC CHIP 15PF 5% 50V	
C370	1-164-505-11	CERAMIC CHIP 2.2MF 16V	(KV-25C2B/25C2D/25C2E)
C371	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C372	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	(KV-25C2B/25C2D/25C2E)
C373	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	(KV-25C2B/25C2D/25C2E)
C1001	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C1002	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C1010	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C1013	1-126-965-11	ELECT 22MF 20% 50V	
C1014	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C1015	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	
C1020	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
		< FILTER >	
CF120	1-409-327-00	TRAP, CERAMIC (6.5MHz) (KV-25C2B)	
		< CONNECTOR >	
CN1	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
CN2	*1-568-880-51	PLUG, CONNECTOR 5P	
CN201	1-766-296-11	CONNECTOR, DUAL SCART	
CN301	*1-568-882-51	PIN, CONNECTOR 7P	
		< DIODE >	
D2	8-719-988-62	DIODE 1SS355	
D10	8-719-158-15	DIODE RD5.6S-B	
D11	8-719-158-15	DIODE RD5.6S-B	
D12	8-719-158-15	DIODE RD5.6S-B	
D101	8-719-977-81	DIODE DTZ33B	
D201	8-719-977-22	DIODE DTZ9.1	
D202	8-719-977-22	DIODE DTZ9.1	
D203	8-719-977-22	DIODE DTZ9.1	
D204	8-719-977-22	DIODE DTZ9.1	
D205	8-719-977-22	DIODE DTZ9.1	
D206	8-719-977-22	DIODE DTZ9.1	
D207	8-719-977-22	DIODE DTZ9.1	
D208	8-719-977-22	DIODE DTZ9.1	
D209	8-719-977-22	DIODE DTZ9.1	
D210	8-719-977-22	DIODE DTZ9.1	
D211	8-719-977-22	DIODE DTZ9.1	
D212	8-719-977-22	DIODE DTZ9.1	
D213	8-719-977-22	DIODE DTZ9.1	
D214	8-719-977-22	DIODE DTZ9.1	
D215	8-719-977-22	DIODE DTZ9.1	
D216	8-719-158-15	DIODE RD5.6S-B	

REF.NO.	PART NO.	DESCRIPTION	REMARK
D217	8-719-158-15	DIODE RD5.6S-B	
D218	8-719-158-15	DIODE RD5.6S-B	
D220	8-719-988-62	DIODE 1SS355	
D221	8-719-988-62	DIODE 1SS355	
D222	8-719-977-22	DIODE DTZ9.1	
D223	8-719-977-22	DIODE DTZ9.1	
D224	8-719-977-22	DIODE DTZ9.1	
D225	8-719-977-22	DIODE DTZ9.1	
D226	8-719-977-22	DIODE DTZ9.1	
D227	8-719-977-13	DIODE DTZ6.8C	
D251	8-719-047-16	DIODE BAS216	
D320	8-719-977-22	DIODE DTZ9.1	
D370	8-719-047-16	DIODE BAS216 (KV-25C2B/25C2D/25C2E)	
D1010	8-719-036-58	DIODE MA3030-H(TX)	
		< LINE FILTER >	
FL101	1-236-071-11	ENCAPSULATED COMPONENT	
FL201	1-236-071-11	ENCAPSULATED COMPONENT	
FL202	1-236-071-11	ENCAPSULATED COMPONENT	
FL203	1-236-071-11	ENCAPSULATED COMPONENT	
FL1001	1-236-071-11	ENCAPSULATED COMPONENT	
		< IC >	
IC1	8-759-376-75	IC SDA5250M-C5-GEG	
IC2	8-759-334-20	IC ST24E32M6TR	
IC3	8-759-353-82	IC TMS27PC020A-15FML	
IC4	8-759-394-57	IC PST593C-MMP-4P	
IC201	8-752-076-06	IC CXA2040Q-T4	
IC202	8-759-376-80	IC MSP3410B-PS-F7-T (KV-25C2B/25C2E)	
	8-759-376-56	IC MSP3400C-PS-C6-T (KV-25C2A/25C2D)	
IC203	8-759-385-76	IC MC14052 BDR2	
IC301	8-752-076-09	IC CXA2000Q-TL	
IC302	8-759-288-85	IC TDA4665T-T	
IC303	8-759-251-56	IC TDA8395T (KV-25C2B/25C2D/25C2E)	
IC1001	8-759-376-76	IC SDA5273CP-GEG	
		< COIL >	
L10	1-410-379-31	INDUCTOR CHIP 6.8UH	
L102	1-408-406-00	INDUCTOR 5.6UH (KV-25C2B)	
L111	1-410-993-11	INDUCTOR CHIP 1UH	
L120	1-408-408-00	INDUCTOR 8.2UH	
L121	1-408-397-00	INDUCTOR 1UH	
L122	1-408-408-00	INDUCTOR 8.2UH	
L300	1-408-607-31	INDUCTOR 22UH	
		< TRANSISTOR >	
Q1	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q4	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q80	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q81	8-729-216-22	TRANSISTOR 2SA1162-G	
Q110	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q111	8-729-216-22	TRANSISTOR 2SA1162-G	
Q112	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q113	8-729-216-22	TRANSISTOR 2SA1162-G	
Q114	8-729-216-22	TRANSISTOR 2SA1162-G	
Q120	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q121	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-25C2B)	
Q122	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q124	8-729-920-74	TRANSISTOR 2SC2412K-QR (KV-25C2B)	
Q130	8-729-216-22	TRANSISTOR 2SA1162-G (KV-25C2B)	
Q201	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q202	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q203	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q204	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q205	8-729-901-01	TRANSISTOR DTC144EK	
Q206	8-729-216-22	TRANSISTOR 2SA1162-G	
Q207	8-729-216-22	TRANSISTOR 2SA1162-G	
Q300	8-729-901-01	TRANSISTOR DTC144EK	
Q304	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q305	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q306	8-729-901-01	TRANSISTOR DTC144EK	
Q330	8-729-216-22	TRANSISTOR 2SA1162-G	
Q331	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q332	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1001	8-729-901-01	TRANSISTOR DTC144EK	
Q1002	8-729-216-22	TRANSISTOR 2SA1162-G	
		< RESISTOR >	
JR5	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR6	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR101	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR201	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR204	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR205	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR206	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR207	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR304	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR305	1-216-296-00	METAL GLAZE 0 5% 1/8W	
R1	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R2	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R3	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R4	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R5	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R7	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R8	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R9	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R18	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R19	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R20	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R21	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R24	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R25	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R28	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R29	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R30	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R31	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R32	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R33	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R34	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R35	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R36	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R37	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R38	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R39	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R40	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
R42	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R44	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R46	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
R47	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R48	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R49	1-216-025-00	METAL GLAZE 100 5% 1.10W	
R54	1-216-025-00	METAL GLAZE 100 5% 1/10W	

A

REF.NO.	PART NO.	DESCRIPTION				REMARK
R58	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R59	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R60	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R61	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R62	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R63	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R64	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R65	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R66	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R67	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R69	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R70	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R71	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R72	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R73	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R74	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R75	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R76	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R77	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R78	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R79	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R80	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R81	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R82	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R83	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R84	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R85	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R86	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R87	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R88	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R91	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R92	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R93	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R94	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R95	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R97	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R98	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R101	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R102	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R103	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R104	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R105	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R106	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R110	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R111	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R112	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R113	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R114	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R115	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R116	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R117	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R118	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R119	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R120	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R121	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R122	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R123	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R124	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R125	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R126	1-216-025-00	METAL GLAZE	100	5%	1/10W	(KV-25C2B)
R127	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R128	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R129	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R130	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	(KV-25C2B)
R131	1-216-073-00	METAL GLAZE	10K	5%	1/10W	(KV-25C2B)
R132	1-216-025-00	METAL GLAZE	100	5%	1/10W	(KV-25C2B)
R133	1-216-041-00	METAL GLAZE	470	5%	1/10W	(KV-25C2B)
R134	1-216-001-00	METAL GLAZE	10	5%	1/10W	(KV-25C2B)
R135	1-216-045-00	METAL GLAZE	680	5%	1/10W	(KV-25C2B)
R136	1-216-033-00	METAL GLAZE	220	5%	1/10W	(KV-25C2B)
R137	1-216-049-00	METAL GLAZE	1K	5%	1/10W	(KV-25C2B)
R138	1-216-041-00	METAL GLAZE	470	5%	1/10W	(KV-25C2B)
R200	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R201	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R202	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R203	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R204	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R205	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R206	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R208	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R209	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R210	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R211	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R212	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R213	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R214	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R216	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R217	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R218	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R219	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R220	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R221	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R222	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R223	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R224	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R225	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R226	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R227	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R228	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R229	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R230	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R232	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R233	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R234	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R235	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R236	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R237	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R238	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R239	1-216-039-00	METAL GLAZE	390	5%	1/10W	

A C

REF.NO.	PART NO.	DESCRIPTION				REMARK
R240	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R241	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R242	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R243	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R244	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R245	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R246	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R247	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R249	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R255	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R256	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R270	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R271	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R272	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R273	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R280	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R281	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R282	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R283	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R284	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R285	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R286	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R300	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R301	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R302	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R303	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R308	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R309	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R310	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R311	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R312	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R313	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R314	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R315	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R316	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R318	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R319	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R320	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R321	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R322	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R323	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R324	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R326	1-216-025-00	METAL GLAZE	100	5%	1.10W	
R327	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R328	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W	
R329	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R330	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R331	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R332	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R333	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R334	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R335	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	
R336	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R337	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R338	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R339	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R340	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R341	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R342	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R343	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R344	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R345	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R346	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R347	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R348	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R349	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R350	1-216-042-00	METAL GLAZE	510	5%	1/10W	
R351	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R352	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R353	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R354	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R357	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R370	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1001	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1002	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1010	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1012	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1014	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1020	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1021	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1022	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1023	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1024	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1026	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1027	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1028	1-216-025-00	METAL GLAZE	100	5%	1/10W	

< TUNER >

TU101	1-693-338-11	TUNER/VIF (AEP) (KV-25C2A/25C2D/25C2E)	
	1-693-340-11	TUNER/VIF (FR) (KV-25C2B)	

< CRYSTAL >

X1	1-767-154-21	VIBRATOR, CERAMIC	
X201	1-760-628-11	VIBRATOR, CRYSTAL 18.432MHz	
X301	1-567-504-11	OSCILLATOR, CRYSTAL	
X302	1-567-505-11	OSCILLATOR, CRYSTAL	
X303	1-767-127-11	VIBRATOR, CERAMIC	
X1001	1-579-965-21	VIBRATOR, CRYSTAL 20.5MHz	

****

*A-1638-087-A	C BOARD, COMPLETE				
	**********				

< CAPACITOR >

C702	1-102-824-00	CERAMIC	470PF	5%	50V
C703	1-102-115-00	CERAMIC	560PF	10%	50V
C708	1-162-114-00	CERAMIC	0.0047MF		2KV
C710	1-107-652-11	ELECT	10MF	20%	250V
C712	1-102-115-00	CERAMIC	560PF	10%	50V
C714	1-126-967-11	ELECT	47MF	20%	16V
C717	1-102-114-00	CERAMIC	470PF	10%	50V
C718	1-102-114-00	CERAMIC	470PF	10%	50V
C719	1-102-114-00	CERAMIC	470PF	10%	50V
C722	1-101-880-00	CERAMIC	47PF	5%	50V
C723	1-101-880-00	CERAMIC	47PF	5%	50V
C724	1-101-880-00	CERAMIC	47PF	5%	50V

< CONNECTOR >

CN701	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P	

C D

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN702	1-695-915-11	TAB (CONTACT)	
CN703	*1-568-882-51	PIN, CONNECTOR 7P	
		< DIODE >	
D701	8-719-110-14	DIODE RD9.1ES-B3	
D702	8-719-991-33	DIODE 1SS133T-77	
D706	8-719-991-33	DIODE 1SS133T-77	
D707	8-719-991-33	DIODE 1SS133T-77	
D708	8-719-991-33	DIODE 1SS133T-77	
D709	8-719-991-33	DIODE 1SS133T-77	
D710	8-719-991-33	DIODE 1SS133T-77	
D711	8-719-302-43	DIODE EL1Z	
D713	8-719-991-33	DIODE 1SS133T-77	
D714	8-719-991-33	DIODE 1SS133T-77	
D715	8-719-991-33	DIODE 1SS133T-77	
D716	8-719-991-33	DIODE 1SS133T-77	
D717	8-719-991-33	DIODE 1SS133T-77	
D718	8-719-991-33	DIODE 1SS133T-77	
D719	8-719-991-33	DIODE 1SS133T-77	
		< CRT SOCKET >	
J701 ⚠	1-526-990-22	SOCKET, CRT	
		< COIL >	
L704	1-408-609-41	INDUCTOR 33UH	
		< TRANSISTOR >	
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q703	8-729-906-70	TRANSISTOR BF871-127	
Q704	8-729-200-17	TRANSISTOR 2SA1091-O	
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q706	8-729-906-70	TRANSISTOR BF871-127	
Q707	8-729-200-17	TRANSISTOR 2SA1091-O	
Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q709	8-729-906-70	TRANSISTOR BF871-127	
Q710	8-729-200-17	TRANSISTOR 2SA1091-O	
		< RESISTOR >	
R704	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
R706	1-247-815-91	CARBON 220 5% 1/4W	
R707	1-249-408-11	CARBON 180 5% 1/4W	
R711	1-249-423-11	CARBON 3.3K 5% 1/4W	
R714	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
R715	1-249-417-11	CARBON 1K 5% 1/4W	
R716	1-247-815-91	CARBON 220 5% 1/4W	
R717	1-249-408-11	CARBON 180 5% 1/4W	
R720	1-249-423-11	CARBON 3.3K 5% 1/4W	
R723	1-249-417-11	CARBON 1K 5% 1/4W	
R724	1-202-846-00	SOLID 470K 10% 1/2W	
R727	1-247-815-91	CARBON 220 5% 1/4W	
R728	1-216-350-11	METAL OXIDE 1.2 5% 1W F	
R729	1-249-408-11	CARBON 180 5% 1/4W	
R731	1-249-423-11	CARBON 3.3K 5% 1/4W	
R734	1-247-807-31	CARBON 100 5% 1/4W	
R736	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
R739	1-249-417-11	CARBON 1K 5% 1/4W	
R741	1-202-549-00	SOLID 100 20% 1/2W	
R744	1-249-426-11	CARBON 5.6K 5% 1/4W	
R745	1-249-426-11	CARBON 5.6K 5% 1/4W	
R746	1-249-426-11	CARBON 5.6K 5% 1/4W	

REF.NO.	PART NO.	DESCRIPTION	REMARK
		< VARIABLE RESISTOR >	
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
RV702	1-241-656-21	RES, ADJ, METAL FILM 110M	
**********			
	*A-1642-167-A	D BOARD, COMPLETE **********	
	4-201-023-11	SPACER, INSULATING	
	4-202-373-01	SPRING, IC	
	*4-203-258-01	HOLDER, LED	
		< CAPACITOR >	
C502	1-102-824-00	CERAMIC 470PF 5% 50V	
C503	1-136-165-00	FILM 0.1MF 5% 50V	
C504	1-102-824-00	CERAMIC 470PF 5% 50V	
C506	1-126-941-11	ELECT 470MF 20% 25V	
C507	1-109-953-11	ELECT 2.2MF 20% 50V	
C509	1-136-165-00	FILM 0.1MF 5% 50V	
C510	1-126-969-11	ELECT 220MF 20% 50V	
C511	1-136-202-11	FILM 0.33MF 5% 63V	
C513	1-106-220-00	MYLAR 0.1MF 10% 100V	
C514	1-136-165-00	FILM 0.1MF 5% 50V	
C515	1-126-941-11	ELECT 470MF 20% 25V	
C517	1-126-941-11	ELECT 470MF 20% 25V	
C518	1-102-228-00	CERAMIC 470PF 10% 500V	
C519	1-102-228-00	CERAMIC 470PF 10% 500V	
C520	1-126-941-11	ELECT 470MF 20% 25V	
C521	1-107-698-11	ELECT 10MF 20% 25V	
C522	1-126-964-11	ELECT 10MF 20% 50V	
C523	1-136-165-00	FILM 0.1MF 5% 50V	
C600 ⚠	1-113-890-51	ELECT 0.0022MF 20% 250V	
C601 ⚠	1-161-964-91	CERAMIC 0.0047MF 250V	
C602 ⚠	1-161-964-91	CERAMIC 0.0047MF 250V	
C603	1-125-318-00	ELECT(BLOCK) 220MF 20% 400V	
C604	1-126-968-11	ELECT 100MF 20% 50V	
C605	1-107-929-11	ELECT 10MF 20% 100V	
C606	1-162-318-11	CERAMIC 0.001MF 10% 500V	
C607	1-104-666-11	ELECT 220MF 20% 25V	
C608	1-109-880-11	FILM 0.0015MF 3% 2KV	
C611	1-102-228-00	CERAMIC 470PF 10% 500V	
C612	1-111-160-11	ELECT 22MF 20% 100V	
C613	1-124-347-00	ELECT 100MF 20% 160V	
C614	1-128-526-11	ELECT 100MF 20% 25V	
C615	1-111-067-11	ELECT 1000MF 20% 25V	
C616	1-111-067-11	ELECT 1000MF 20% 25V	
C617	1-128-339-51	ELECT 2200MF 20% 16V	
C618	1-136-165-00	FILM 0.1MF 5% 50V	
C619	1-102-228-00	CERAMIC 470PF 10% 500V	
C620	1-102-228-00	CERAMIC 470PF 10% 500V	
C621	1-136-165-00	FILM 0.1MF 5% 50V	
C622	1-107-925-11	ELECT 1MF 20% 100V	
C623	1-104-666-11	ELECT 220MF 20% 25V	
C624	1-136-165-00	FILM 0.1MF 5% 50V	
C625	1-126-967-11	ELECT 47MF 20% 50V	
C626	1-104-666-11	ELECT 220MF 20% 25V	
C628	1-126-964-11	ELECT 10MF 20% 50V	
C629	1-111-097-11	ELECT 2200MF 20% 35V	
C630	1-111-097-11	ELECT 2200MF 20% 35V	
C631	1-126-965-11	ELECT 22MF 20% 50V	

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

D

REF.NO.	PART NO.	DESCRIPTION			REMARK
C632	1-104-666-11	ELECT	220MF	20%	25V
C633 ⚠	1-107-564-11	FILM	0.22MF	20%	300V
C634 ⚠	1-107-564-11	FILM	0.22MF	20%	300V
C635 ⚠	1-107-564-11	FILM	0.22MF	20%	300V
C636 ⚠	1-113-890-51	ELECT	0.0022MF	20%	250V
C638	1-136-203-11	FILM	0.01MF	5%	630V
C640	1-106-220-00	MYLAR	0.1MF	10%	100V
C644	1-137-043-11	FILM	0.0047MF	10%	400V
C647	1-162-116-00	CERAMIC	680PF	10%	2KV
C651	1-102-228-00	CERAMIC	470PF	10%	500V
C800	1-137-368-11	FILM	0.0047MF	5%	50V
C801	1-137-372-11	FILM	0.022MF	5%	50V
C802	1-136-153-00	FILM	0.01MF	5%	50V
C804	1-136-165-00	FILM	0.1MF	5%	50V
C805	1-136-207-11	FILM	0.047MF	10%	250V
C806	1-104-999-11	MYLAR	0.1MF	10%	200V
C807	1-136-540-11	FILM	0.82MF	5%	200V
C810	1-107-683-11	ELECT	2.2MF		250V
C811	1-102-212-00	CERAMIC	820PF	10%	500V
C812	1-136-111-00	FILM	1MF	5%	200V
C813	1-129-722-00	FILM	0.047MF	10%	630V
C814	1-136-591-11	FILM	0.017MF	3%	1.4KV
C815	1-136-562-11	MYLAR	0.0082MF	10%	400V
C816	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C817	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C818	1-162-129-00	CERAMIC	150PF	10%	2KV
C819	1-136-208-11	FILM	0.068MF	10%	250V
C820	1-102-114-00	CERAMIC	470PF	10%	50V
C821	1-162-114-00	CERAMIC	0.0047MF		2KV
C822	1-107-662-11	ELECT	22MF	20%	250V
C824	1-123-024-21	ELECT	33MF		160V
C829	1-124-902-00	ELECT	0.47MF	20%	50V
C830	1-136-165-00	ELECT	0.1MF	5%	50V
C832	1-136-173-00	ELECT	0.47MF	5%	50V
C834	1-128-551-11	ELECT	22MF	20%	25V
C835	1-162-318-11	CERAMIC	0.001MF	10%	500V
C836	1-162-117-00	CERAMIC	100PF	10%	500V
C838	1-102-228-00	CERAMIC	470PF	10%	500V
C839	1-136-207-11	FILM	0.1MF	5%	630V
C901	1-101-810-00	CERAMIC	100PF	5%	500V
C902	1-137-372-11	FILM	0.022MF	5%	50V
C903	1-137-372-11	FILM	0.022MF	5%	50V
C904	1-104-665-11	ELECT	100MF	20%	25V
C905	1-126-964-11	ELECT	10MF	20%	50V
C906	1-126-964-11	ELECT	10MF	20%	50V
C907	1-126-964-11	ELECT	10MF	20%	50V
C908	1-126-964-11	ELECT	10MF	20%	50V
C911	1-126-964-11	ELECT	10MF	20%	50V
C913	1-101-810-00	CERAMIC	100PF	5%	500V
C1200	1-136-165-00	FILM	0.1MF	5%	50V
C1201	1-136-173-00	FILM	0.47MF	5%	50V
C1202	1-136-173-00	FILM	0.47MF	5%	50V
C1203	1-136-169-00	FILM	0.22MF	5%	50V
C1204	1-136-169-00	FILM	0.22MF	5%	50V
C1205	1-101-005-00	CERAMIC	0.022MF		50V
C1206	1-101-005-00	CERAMIC	0.022MF		50V
C1207	1-126-933-11	ELECT	100MF	20%	16V
C1208	1-126-963-11	ELECT	4.7MF	20%	50V
C1209	1-126-963-11	ELECT	4.7MF	20%	50V
C1214	1-126-933-11	ELECT	100MF	20%	16V
C1215	1-136-173-00	FILM	0.47MF	5%	50V
C1216	1-137-366-11	FILM	0.0022MF	5%	50V
C1217	1-137-366-11	FILM	0.0022MF	5%	50V
C1218	1-126-935-11	ELECT	470MF	20%	16V
		< CONNECTOR >			
CN600 ⚠	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
CN601 ⚠	1-508-765-11	PIN, CONNECTOR (5MM PITCH) 3P			
CN603 ⚠	*1-580-844-11	PIN, CONNECTOR (POWER)			
CN800	*1-580-798-11	CONNECTOR PIN (DY) 6P			
CN803	1-695-915-11	TAB (CONTACT)			
CN804	1-778-037-11	PIN, CONNECTOR 6P			
CN900	1-568-678-11	TERMINAL BLOCK, S 3P			
CN902	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P			
CN1408	*1-568-879-11	PIN, CONNECTOR 4P			
		< DIODE >			
D500	8-719-109-85	DIODE RD5.1ES-B2			
D502	8-719-979-85	DIODE EGP20G			
D503	8-719-979-85	DIODE EGP20G			
D504	8-719-991-33	DIODE 1SS133T-77			
D505	8-719-982-03	DIODE MTZJ-3.6A			
D506	8-719-991-33	DIODE 1SS133T-77			
D507	8-719-109-85	DIODE RD5.1ES-B2			
D600	8-719-510-53	DIODE D4SB60L			
D601	8-719-046-77	DIODE EM1-V1			
D603	8-719-109-97	DIODE RD6.8ES-B2			
D604	8-719-046-75	DIODE EU-1-V1			
D605	8-719-302-43	DIODE EL1Z			
D606	8-719-302-43	DIODE EL1Z			
D607	8-719-046-78	DIODE EG-1Z-V1			
D608	8-719-302-06	DIODE EU2A			
D609	8-719-301-64	DIODE RU4DS			
D610	8-719-046-74	DIODE AU-01Z-V1			
D611	8-719-045-48	DIODE FML-G12S			
D612	8-719-046-76	DIODE RU3YX-1			
D613	8-719-045-48	DIODE FML-G12S			
D614	8-719-045-48	DIODE FML-G12S			
D615	8-719-046-75	DIODE EU-1-V1			
D616	8-719-110-03	DIODE RD7.5ESB2			
D617	8-719-991-33	DIODE 1SS133T-77			
D618	8-719-991-33	DIODE 1SS133T-77			
D619	8-719-991-33	DIODE 1SS133T-77			
D620	8-719-991-33	DIODE 1SS133T-77			
D622	8-719-923-60	DIODE MTZJ-T-77-9.1A			
D625	8-719-991-33	DIODE 1SS133T-77			
D626	8-719-046-74	DIODE AU-01Z-V1			
D631	8-719-109-93	DIODE RD6.2ES-B2			
D800	8-719-991-33	DIODE 1SS133T-77			
D801	8-719-991-33	DIODE 1SS133T-77			
D802	8-719-991-33	DIODE 1SS133T-77			
D803	8-719-908-03	DIODE GP08D			
D807	8-719-302-43	DIODE EL1Z			
D808	8-719-908-03	DIODE GP08D			
D809	8-719-018-82	DIODE RGP02-20EL-6394			
D810	8-719-302-43	DIODE EL1Z			
D812	8-719-038-49	DIODE FMS-3FU-LF027-1			
D815	8-719-908-03	DIODE GP08D			
D817	8-719-109-85	DIODE RD5.1ES-B2			

D

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D901	8-719-030-11	DIODE SLA-570KT3F	
D902	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D903	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D904	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D905	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D906	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D1201	8-719-109-72	DIODE RD3.9ES-B2	
		< FUSE >	
F601	⚠ 1-576-232-21	FUSE (H.B.C.) 5A/250V	
	⚠ 1-533-230-12	HOLDER, FUSE ;F601	
		< FERRITE BEAD >	
FB600	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB602	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB606	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB607	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB608	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB800	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
		< IC >	
IC500	8-759-192-71	IC STV9379	
IC600	⚠ 8-749-010-84	IC STR-S6708	
IC601	8-749-924-92	IC TLP721(D4-)	
IC602	8-749-920-61	IC SE135N	
IC603	8-759-144-82	IC µPC2405HF	
IC604	8-759-510-52	IC TEA7605	
IC606	8-759-267-25	IC LM2940T-9.0	
IC800	8-759-103-93	IC µPC393C	
IC900	8-747-905-11	RAY CATCHER ELEMENT SBX1790-51	
IC1200	8-759-250-68	IC TDA7264	
IC1201	8-759-502-21	IC TDA2822M	
		< JACK SOCKET >	
J900	1-764-606-11	JACK	
		< COIL >	
L502	1-412-519-11	INDUCTOR 3.3UH	
L503	1-412-519-11	INDUCTOR 3.3UH	
L609	1-412-533-21	INDUCTOR 47UH	
L611	1-412-527-11	INDUCTOR 15UH	
L612	1-412-522-41	INDUCTOR 5.6UH	
L613	1-412-522-41	INDUCTOR 5.6UH	
L615	1-412-529-11	INDUCTOR 22UH	
L616	1-412-533-21	INDUCTOR 47UH	
L802	1-459-104-00	COIL, WITH CORE	
L803	1-420-872-00	COIL, AIR-CORE	
L804	1-411-335-11	COIL, HORIZONTAL LINEARITY	
L805	1-406-674-11	COIL, CHOKE 3.3MMH	
L809	1-412-533-21	INDUCTOR 47UH	
L813	1-412-552-21	INDUCTOR 2.2MMH	
L901	1-408-603-31	INDUCTOR 10UH	
L902	1-408-603-31	INDUCTOR 10UH	
L903	1-408-409-00	INDUCTOR 10UH	
L904	1-408-409-00	INDUCTOR 10UH	

REF.NO.	PART NO.	DESCRIPTION	REMARK
		< IC LINK >	
PS600	⚠ 1-532-686-91	LINK, IC 2.7A (ICP-F75)	
PS601	⚠ 1-532-686-91	LINK, IC 2.7A (ICP-F75)	
PS602	⚠ 1-532-686-91	LINK, IC 2.7A (ICP-F75)	
PS603	⚠ 1-532-686-91	LINK, IC 2.7A (ICP-F75)	
		< TRANSISTOR >	
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q503	8-729-900-89	TRANSISTOR DTC144ES	
Q601	8-729-025-04	TRANSISTOR 2SC3852A	
Q602	8-729-320-28	TRANSISTOR 2SA1667	
Q603	8-729-805-05	TRANSISTOR 2SC3601-E	
Q604	8-729-024-35	TRANSISTOR 2SC2808STP-R	
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q606	8-729-900-65	TRANSISTOR DTA144ES	
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q800	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q801	8-729-017-06	TRANSISTOR 2SC4793	
Q802	8-729-016-32	TRANSISTOR 2SC4927-01	
Q803	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q805	8-729-900-89	TRANSISTOR DTC144ES	
Q900	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1200	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1201	8-729-900-74	TRANSISTOR DTC143TS	
Q1202	8-729-900-80	TRANSISTOR DTC114ES	
Q1203	8-729-900-74	TRANSISTOR DTC143TS	
Q1204	8-729-900-74	TRANSISTOR DTC143TS	
		< RESISTOR >	
R500	1-215-457-00	METAL 33K 1% 1/4W	
R502	1-249-421-11	CARBON 2.2K 5% 1/4W	
R503	1-249-429-11	CARBON 10K 5% 1/4W	
R504	1-215-457-00	METAL 33K 1% 1/4W	
R505	1-249-382-11	CARBON 1.2 5% 1/4W	F
R506	1-215-429-00	METAL 2.2K 1% 1/4W	
R507	1-215-888-00	METAL OXIDE 220 5% 2W	F
R508	1-216-371-00	METAL OXIDE 1.5 5% 2W	F
R509	1-249-443-11	CARBON 0.47 5% 1/4W	F
R510	1-249-443-11	CARBON 0.47 5% 1/4W	F
R519	1-215-425-00	METAL 1.5K 1% 1/4W	
R520	1-215-457-00	METAL 33K 1% 1/4W	
R521	1-215-457-00	METAL 33K 1% 1/4W	
R522	1-247-863-91	CARBON 22K 5% 1/4W	
R523	1-247-863-91	CARBON 22K 5% 1/4W	
R524	1-249-425-11	CARBON 4.7K 5% 1/4W	
R525	1-249-425-11	CARBON 4.7K 5% 1/4W	
R526	1-249-421-11	CARBON 2.2K 5% 1/4W	
R527	1-215-431-00	METAL 2.7K 1% 1/4W	
R600	1-216-490-11	METAL OXIDE 39K 5% 3W	F
R601	1-249-417-11	CARBON 1K 5% 1/4W	
R602	1-215-473-00	FILM 150K 15 1/4W	
R603	1-215-898-11	METAL OXIDE 10K 5% 2W	F
R604	1-249-420-11	CARBON 1.8K 5% 1/4W	
R605	1-216-362-11	METAL OXIDE 0.27 5% 2W	F
R607	1-216-421-11	METAL OXIDE 12 5% 1W	F
R608	1-216-365-00	METAL OXIDE 0.47 5% 2W	F
R610	1-215-421-00	METAL 1K 1% 1/4W	
R611	1-216-354-11	METAL OXIDE 2.7 5% 1W	F
R612	1-249-428-11	CARBON 8.2K 5% 1/4W	

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

D

REF.NO.		PART NO.	DESCRIPTION				REMARK
R613		1-249-417-11	CARBON	1K	5%	1/4W	
R614		1-215-877-11	METAL OXIDE	22K	5%	1W	F
R615		1-249-435-11	CARBON	33K	5%	1/4W	
R616		1-215-471-00	METAL	120K	1%	1/4W	
R617		1-215-901-00	METAL OXIDE	33K	5%	2W	F
R618		1-247-863-91	CARBON	22K	5%	1/4W	
R619		1-216-425-11	METAL OXIDE	56	5%	1W	F
R620		1-260-131-11	CARBON	470K	5%	1/2W	
R621		1-216-425-11	METAL OXIDE	56	5%	1W	F
R622		1-249-437-11	CARBON	47K	5%	1/4W	
R623		1-249-429-11	CARBON	10K	5%	1/4W	
R624		1-249-393-11	CARBON	10	5%	1/4W	F
R625		1-249-434-11	CARBON	27K	5%	1/4W	
R626		1-249-430-11	CARBON	12K	5%	1/4W	
R627		1-216-347-11	METAL OXIDE	0.68	5%	1W	F
R628		1-249-415-11	CARBON	680	5%	1/4W	F
R629	⚠	1-244-945-91	CARBON	1M	5%	1/2W	
R630	⚠	1-218-265-21	METAL	8.2M	5%	1W	
R631	⚠	1-205-949-11	WIREWOUND	1.8	5%	10W	
R632		1-247-807-31	CARBNN	100	5%	1/4W	
R633		1-247-807-31	CARBON	100	5%	1/4W	
R634		1-249-397-11	CARBON	22	5%	1/4W	F
R635		1-249-437-11	CARBON	47K	5%	1/4W	
R636		1-249-417-11	CARBON	1K	5%	1/4W	
R637		1-247-815-91	CARBON	220	5%	1/4W	
R638		1-247-863-91	CARBON	22K	5%	1/4W	
R639		1-215-435-00	METAL	3.9K	1%	1/4W	
R642	⚠	1-205-949-11	WIREWOUND	1.8	5%	10W	
R645		1-249-422-11	CARBON	2.7K	5%	1/4W	
R646		1-249-377-11	CARBON	0.47	5%	1/4W	F
R647		1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R649		1-249-426-11	CARBON	5.6K	5%	1/4W	F
R800		1-249-421-11	CARBON	2.2K	5%	1/4W	
R803		1-249-426-11	CARBON	5.6K	5%	1/4W	
R805		1-249-426-11	CARBON	5.6K	5%	1/4W	
R809		1-247-901-11	CARBON	820K	5%	1/4W	
R812		1-249-421-11	CARBON	2.2K	5%	1/4W	
R813		1-215-869-11	METAL OXIDE	1K	5%	1W	F
R814		1-249-411-11	CARBON	330	5%	1/4W	
R816		1-215-918-00	METAL OXIDE	1.5K	5%	3W	F
R817		1-216-918-00	METAL OXIDE	1.5K	5%	3W	F
R818		1-215-882-00	METAL OXIDE	22	5%	2W	F
R819		1-216-345-11	METAL OXIDE	0.47	5%	1W	F
R820		1-249-403-11	CARBON	68	5%	1/4W	
R821		1-215-909-11	METAL OXIDE	47	5%	3W	F
R822		1-215-868-00	METAL OXIDE	680	5%	1W	F
R824		1-249-420-11	CARBON	1.8K	5%	1/4W	
R826		1-247-752-11	CARBON	1K	5%	1/2W	
R827		1-249-425-11	CARBON	4.7K	5%	1/4W	
R828		1-249-432-11	CARBON	18K	5%	1/4W	
R829		1-249-494-11	CARBON	68K	5%	1/2W	
R830		1-217-778-11	FUSIBLE	1K	5%	1W	F
R833		1-247-891-00	CARBON	330K	5%	1/4W	
R835		1-216-471-11	METAL OXIDE	27	5%	3W	F
R836		1-249-439-11	CARBON	68K	5%	1/4W	
R837		1-249-430-11	CARBON	12K	5%	1/4W	
R840		1-247-807-31	CARBON	100	5%	1/4W	
R841		1-249-418-11	CARBON	1.2K	5%	1/4W	
R842		1-249-417-11	CARBON	1K	5%	1/4W	
R843		1-247-897-11	CARBON	560K	5%	1/4W	
R846		1-249-436-11	CARBON	39K	5%	1/4W	
R847		1-247-893-11	CARBON	390K	5%	1/4W	
R848		1-247-893-11	CARBON	390K	5%	1/4W	
R849		1-249-429-11	CARBON	10K	5%	1/4W	
R850		1-249-425-11	CARBON	4.7K	5%	1/4W	
R851		1-215-898-11	METAL OXIDE	10K	5%	2W	F
R852		1-249-432-11	CARBON	18K	5%	1/4W	
R900		1-247-815-91	CARBON	220	5%	1/4W	
R901		1-247-734-11	CARBON	39	5%	1/2W	
R902		1-247-734-11	CARBON	39	5%	1/2W	
R904		1-249-389-11	CARBON	4.7	5%	1/4W	F
R905		1-247-804-11	CARBON	75	5%	1/4W	
R906		1-247-804-11	CARBON	75	5%	1/4W	
R907		1-247-804-11	CARBON	75	5%	1/4W	
R908		1-249-401-11	CARBON	47	5%	1/4W	
R909		1-249-429-11	CARBON	10K	5%	1/4W	
R910		1-249-422-11	CARBON	2.7K	5%	1/4W	
R911		1-249-426-11	CARBON	5.6K	5%	1/4W	
R912		1-249-429-11	CARBON	10K	5%	1/4W	
R913		1-247-863-91	CARBON	22K	5%	1/4W	
R914		1-249-437-11	CARBON	47K	5%	1/4W	
R919		1-249-437-11	CARBON	47K	5%	1/4W	
R921		1-249-437-11	CARBON	47K	5%	1/4W	
R922		1-247-807-31	CARBON	100	5%	1/4W	
R923		1-249-412-11	CARBON	390	5%	1/4W	
R1200		1-249-425-11	CARBON	4.7K	5%	1/4W	
R1201		1-249-434-11	CARBON	27K	5%	1/4W	
R1202		1-249-389-11	CARBON	4.7	5%	1/4W	F
R1203		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1204		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1205		1-249-428-11	CARBON	8.2K	5%	1/4W	
R1206		1-249-428-11	CARBON	8.2K	5%	1/4W	
R1208		1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1209		1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1211		1-249-424-11	CARBON	3.9K	5%	1/4W	
R1212		1-249-424-11	CARBON	3.9K	5%	1/4W	
R1213		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1216		1-249-413-11	CARBON	470	5%	1/4W	
R1217		1-249-425-11	CARBON	4.7K	5%	1/4W	

< RELAY >

RY600	⚠	1-755-018-11	RELAY	

< SWITCH >

S601	⚠	1-571-433-21	SWITCH, PUSH (AC POWER)	
S900		1-692-979-11	SWITCH, TACTILE	
S901		1-692-979-11	SWITCH, TACTILE	
S902		1-692-979-11	SWITCH, TACTILE	

< SPARK GAP >

SG801		1-519-422-11	GAP, SPARK	

< TRANSFORMER >

LF600	⚠	1-421-776-21	LFT	
LF601	⚠	1-421-776-21	LFT	
T601	⚠	1-429-604-11	SRT	
T800		1-421-794-21	TRANSFORMER, FERRITE (PMT)	
T803	⚠	1-453-169-11	TRANSFORMER ASSY, FLYBACK (NX-1604A2)	
T804		1-437-090-31	HDT	

D K J3

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and marked ⚠ are critical for safety. Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
		< THERMISTOR >	
THP600	⚠ 1-809-827-11	THERMISTOR, POSITIVE	
		**********	
	*A-1649-011-A	K BOARD, COMPLETE **********	
	7-682-548-04	SCREW +P 3X8	
		< CAPACITOR >	
C280	1-126-963-11	ELECT 4.7MF 20% 50V	
C281	1-126-963-11	ELECT 4.7MF 20% 50V	
C282	1-130-831-21	MYLAR 0.56MF 10% 63V	
C283	1-126-963-11	ELECT 4.7MF 20% 50V	
C284	1-124-557-11	ELECT 1000MF 20% 25V	
C285	1-124-557-11	ELECT 1000MF 20% 25V	
C286	1-101-006-00	CERAMIC 0.047MF 50V	
C287	1-136-165-00	FILM 0.1MF 5% 50V	
C288	1-102-074-00	CERAMIC 0.001MF 10% 50V	
C289	1-126-962-11	ELECT 3.3MF 20% 50V	
R287	1-101-006-00	CERAMIC 0.047MF 50V	
		< CONNECTOR >	
CN223	*1-568-878-51	PIN, CONNECTOR 3P	
CN225	*1-564-511-11	PLUG, CONNECTOR 8P	
		< IC >	
IC271	8-759-988-94	IC TDA2050	
		< TRANSISTOR >	
Q203	8-729-900-89	TRANSISTOR DTC144ES	
Q204	8-729-900-80	TRANSISTOR DTC114ES	
Q205	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		< RESISTOR >	
R280	1-249-431-11	CARBON 15K 5% 1/4W	
R281	1-249-431-11	CARBON 15K 5% 1/4W	
R282	1-249-426-11	CARBON 5.6K 5% 1/4W	
R283	1-249-435-11	CARBON 33K 5% 1/4W	
R284	1-249-440-11	CARBON 82K 5% 1/4W	
R285	1-249-417-11	CARBON 1K 5% 1/4W	
R286	1-249-429-11	CARBON 10K 5% 1/4W	
R288	1-216-357-00	METAL OXIDE 4.7 5% 1W	F
R289	1-249-429-11	CARBON 10K 5% 1/4W	
R290	1-247-897-11	CARBON 560K 5% 1/4W	
R291	1-249-425-11	CARBON 4.7K 5% 1/4W	
		**********	
	*A-1651-070-A	J3 BOARD, COMPLETE **********	
		< CAPACITOR >	
C291	1-101-005-00	CERAMIC 0.022MF 50V	
		< CONNECTOR >	
CN203	*1-564-518-11	PLUG, CONNECTOR 3P	
CN204	1-537-339-11	TERMINAL BOARD	
		< COIL >	
L200	1-402-711-11	INDUCTOR, WIDEBAND	
		**********	
		MISCELLANEOUS **********	
	⚠ 1-406-806-21	COIL, DEGAUSSING	
	1-452-032-00	MAGNET, DISK; 10MM Ø	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
	⚠ 1-453-169-11	TRANSFORMER ASSY, FLYBACK(NX-1604A2)	
	1-504-146-11	SPEAKER (5x11CM)	
	⚠ 1-571-433-21	SWITCH, PUSH (AC POWER)	
	1-693-338-11	TUNER/VIF (AEP) (KV-25C2A/25C2D/25C2E)	
	1-693-340-11	TUNER/VIF (FR) (KV-25C2B)	
	⚠ 1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V	
	⚠ 1-775-045-11	CONNECTOR, DEFLECTION YOKE (DOUBLE)	
	⚠ 8-451-404-51	DEFLECTION YOKE (Y25GXA-B2)	
V901	⚠ 8-733-856-05	PICTURE TUBE (SD-269)(M68LCT60X)	
	⚠ 8-733-254-61	ITC 25GX2(BGD)-A1	
		**********	
		ACCESSORIES AND PACKING MATERIALS **********	
	1-544-767-11	SPEAKER (13CM)	
	1-696-554-11	CABLE, SPEAKER (WITH PLUG)	
	4-039-358-01	SCREW (4X16), (+) BV TAPPING	
	*4-039-905-02	BAG, PROTECTION	
	*4-203-492-01	CUSHION (UPPER) (ASSY)	
	*4-203-493-01	CUSHION (LOWER) (ASSY)	
	*4-203-494-01	INDIVIDUAL CARTON	
	4-203-533-41	MANUAL, INSTRUCTION (KV-25C2A)(ITALIAN)	
	4-203-533-51	MANUAL, INSTRUCTION (KV-25C2B) (FRENCH/GERMAN/ITALIAN/DUTCH)	
	4-203-533-11	MANUAL, INSTRUCTION (KV-25C2D) (DUTCH/GREEK/ENGLISH/GERMAN/TURKISH)	
	4-203-533-71	MANUAL, INSTRUCTION (KV-25C2E)(SPANISH)	
	4-203-533-81	MANUAL, INSTRUCTION (KV-25C2E) (PORTUGUESE/FINNISH/DANISH/NORWEGIAN/ SWEDISH)	
	A-1678-053-A	BOX ASSY, WOOFER	
		REMOTE COMMANDER **********	
	1-473-692-11	COMMANDER, STANDARD TYPE (RM-862)	
		**********	

Sony Corporation
Consumer A & V Products Company
TV & Display Products Div.

9-974-935-01

English
96FP71XX-1
Printed in U.K.
© 1996.6